# VOLUME 1

HOUSING METROPOLITAN BOSTON
HOUSING DEMAND AND HOUSING SUPPLY,
1950 - 1980

Prepared By

METROPOLITAN AREA PLANNING COUNCIL, COMMONWEALTH OF MASSACHUSETTS



## HOUSING METROPOLITAN BOSTON

#### Volume 1

HOUSING DEMAND AND HOUSING SUPPLY, 1950 to 1980

Prepared by:
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November, 1969



### ABSTRACT

TITLE: Housing Metropolitan Boston: Volume I, Housing Demand and Housing Supply, 1950 to 1980

AUTHOR: Metropolitan Area Planning Council

SUBJECT: An aggregate housing market study of past patterns and future trends of housing supply and demand in the Boston metropolitan area.

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ABSTRACT: Volume I of Housing Metropolitan Boston, subtitled
Housing Demand and Housing Supply, 1950 to 1980, describes
housing demand and housing supply in 92 communities of
the Boston metropolitan area. The report presents historic,
current, and projected housing data for the metropolitan
housing market area, and analyzes the relationships of past
and estimated future trends in housing demand and supply.
Among the components of housing demand studied in this
report are population, households, tenure, incomes, and
housing expenditures. The components of housing supply
studied include condition and changes in the housing stock,
as well as price movements in rental and sales units.

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#### DEFINITIONS

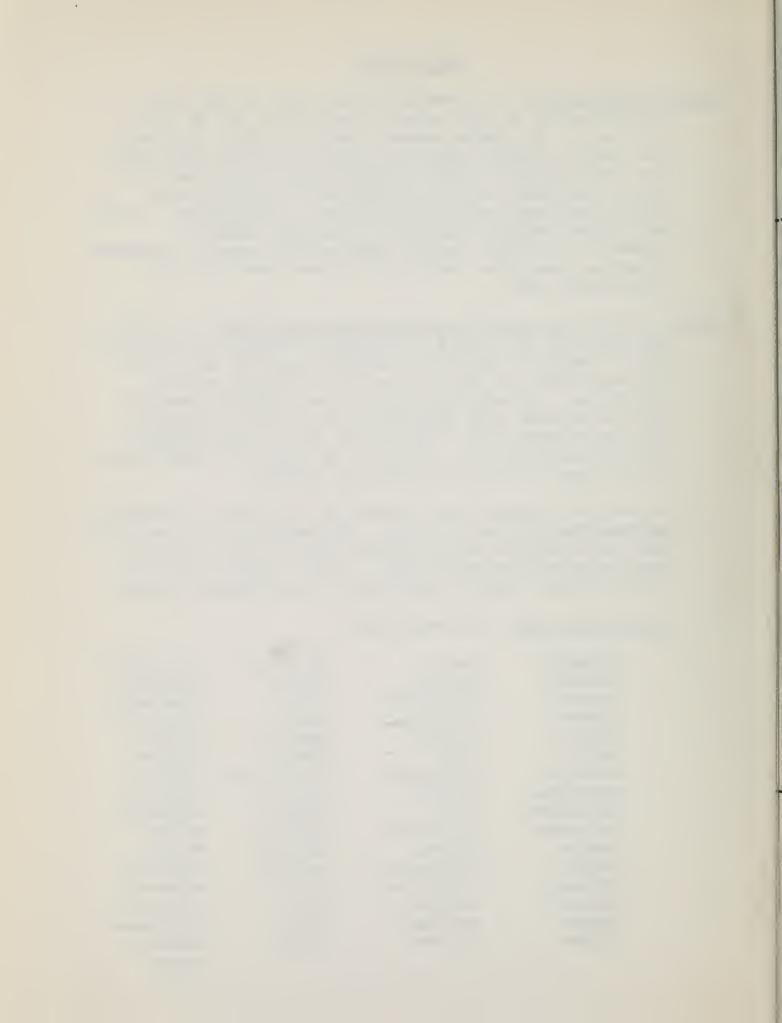
Housing Market Area: The Housing Market Area, or HMA as it is referred to in this report, consists of the 92 communities in the Boston metropolitan area which comprised the Council District when the housing study was initiated. The area is equal to the 78 communities in the 1964 U. S. Census definition of the Boston Standard Metropolitan Statistical Area, plus the following 14 communities: Acton, Bellingham, Bolton, Brockton, Foxborough, Franklin, Gloucester, Hudson, Ipswich, Marlborough, Maynard, Rockport, Stoughton, and Stow. Map I on the next page shows the 92-community HMA.

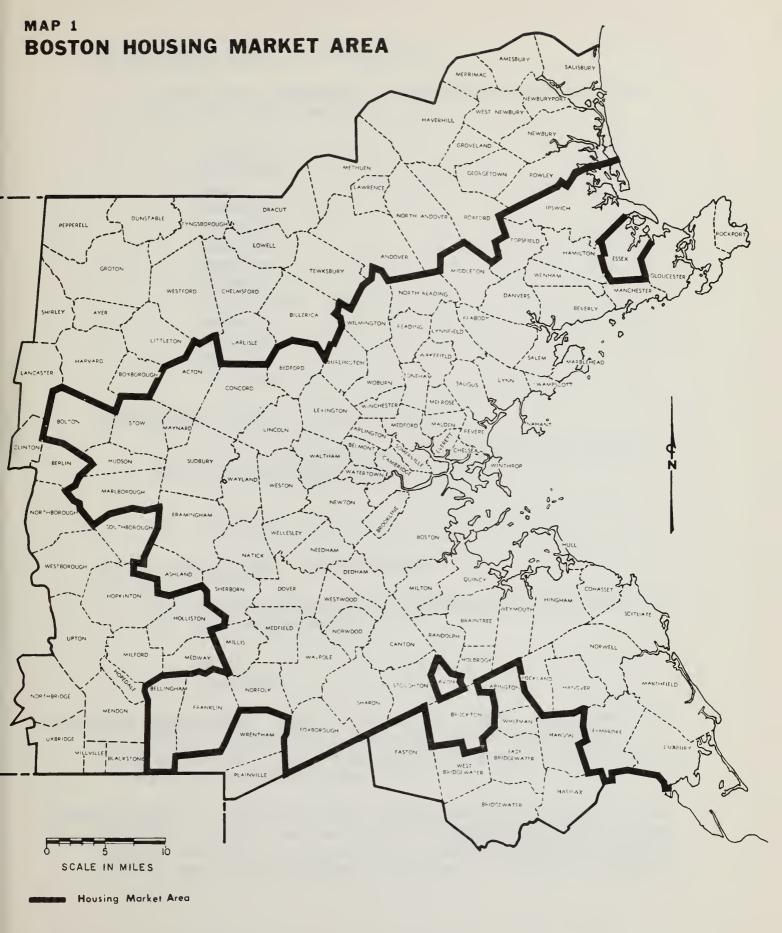
Boston Standard Metropolitan Statistical Area (SMSA): In 1950 the Bureau of the Budget established "standard metropolitan areas" (SMA's) to permit all Federal agencies to utilize the same areas for the publication of general purpose statistics. By definition these areas include a central city, or cities, with populations of 50,000 or more and contiguous areas with economic and social relationships with the central city. The title of the SMA is identified by the name of its central city, or cities.

In 1960 the term SMA was replaced by the SMSA, or standard metropolitan statistical area. The definition of the Boston SMSA has undergone several changes since 1950 to reflect population and economic growth. These changes, occurring in 1959, 1960, and 1964 are shown on the following pages.

# Boston SMA, 1950: 65 communities

Non-1 day and any	_		
Arlington	Dover	Middleton	Somerville
Ashland	Everett	Milton	Stoneham
Bedford	Framingham	Nahant	Swampscott
Belmont	Hamilton	Natick	Wakefield
Beverly	Hingham	Needham	Walpole
Boston	Hull	Newton	Waltham
Braintree	Lexington	N. Reading	Watertown
Brookline	Lincoln	Norwood	Wayland
Burlington	Lynn	Peabody	Wellesley
Cambridge	Lynnfield	Quincy	Wenham
Canton	Malden	Randolph	Weston
Chelsea	Manchester	Reading	Westwood
Cohasset	Marblehead	Revere	Weymouth
Concord	Medford	Salem	Wilmington
Danvers	Medfield	Saugus	Winchester
Dedham	Melrose	Sharon	Winthrop
			Woburn ix





The preparation of this map was financially aided through a Federal grant from the Department of Housing and Urban Development under the Urban Planning Assistance Program authorized by Section 701 of the Housing Act of 1954, as amended.



## Boston SMSA, 1959: 78 communities

In 1959 the following 13 communities were added to the 1950 Boston SMA:

Sudbury
Topsfield
Avon
Holbrook
Norfolk
Abington
Duxbury
Hanover
Marshfield

Norwell Pembroke Rockland

Scituate

## Boston SMSA, 1960: 76 communities

In 1960 the following two communities were removed from the 1959 Boston SMSA:

Avon Abington

# Boston SMSA, 1964: 78 communities

In 1964 the following two communities were added to the 1960 Boston SMSA:

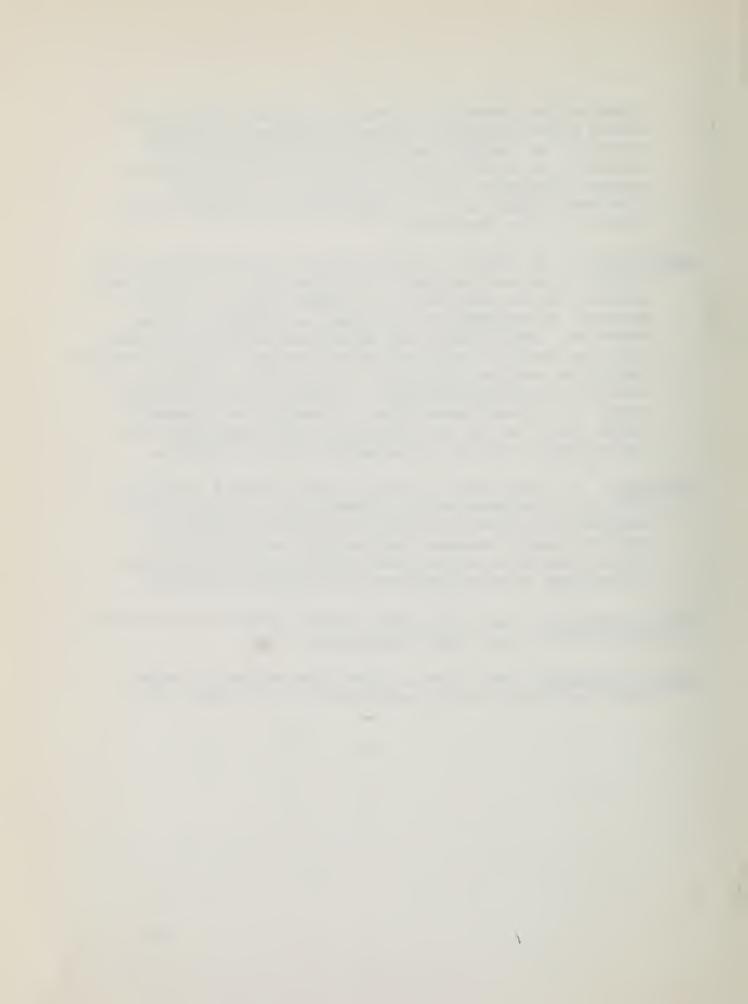
Millis Sherborn

- The Core Communities: For the purposes of this study the Core is composed of the five cities of Boston, Cambridge, Chelsea, Everett, and Somerville, and the Town of Brookline, except where otherwise specified.
- <u>Dwelling Unit</u>: A dwelling unit classification was used in the 1950 U. S. Census and in the 1959 <u>Components of Inventory</u> <u>Change program.</u> A dwelling unit, as defined by the Census, and as used in this study, is a group of rooms occupied or



intended for occupancy as separate living quarters and having either separate cooking equipment or separate entrance; or a single room occupied or intended for occupancy as separate quarters if (a) it has separate cooking equipment, (b) it is located in a regular apartment house, or (c) it constitutes the only living quarters in the structure.

- Housing Unit: In the 1960 census the unit of enumeration was changed from dwelling unit to housing unit. Housing units include houses, apartments, or single rooms which are occupied or intended for occupancy as separate living quarters. The housing unit definition is more inclusive than the dwelling unit definition, because separate cooking facilities are not necessary as they were to satisfy the dwelling unit classification. Housing units must have either (1) direct access from the outside or through a common hall, or (2) a kitchen or cooking equipment for the exclusive use of the occupants of the quarters.
- Household: In this study all persons who occupy a housing unit are considered to be a household. The 1950 Census considered a household to be all persons occupying a dwelling unit. Because the dwelling unit concept is not as inclusive as the housing unit the 1950 and 1960 definitions of households are not exactly comparable.
- Current Dollars: This term refers to the actual prices or incomes in the year under discussion.
- Constant Dollars: This term is used when prices or incomes have been held constant according to a set base year.



### SUMMARY

### Housing Demand, 1950 to 1960

Population:

Between 1950 and 1960 the population of the Housing Market Area (HMA) increased by 217,400 persons, or 8.4 percent, from 2,580,900 in 1950 to 2,798,300 in 1960. The population increase resulted from a 12 percent loss in the core communities and a 23.8 percent gain in the rest of the HMA. The five core communities decreased their share of the total population of the HMA by eight percent—from 43 percent in 1950 to 35 percent in 1960. As a result there was a relatively greater demand for housing in the suburban communities than within the core.

Households:

During the 1950-1960 decade the number of households in the Boston Standard Metropolitan Statistical Area (SMSA) increased by 19.9 percent-from 642,675 in 1950 to 770,468 in 1960. Trends toward more smaller households, more younger households, and more older households became apparent. In the Boston SMSA the average household size decreased from 3.46 persons in 1950 to 3.23 persons in 1960. In 1960 the HMA contained a total of 831,800 households.

Income:

The median household income in the Boston SMSA rose from \$3,570 in 1950 to \$6,020 in 1960, to \$7,280 in 1965, an estimated increase of 104 percent between 1950 and 1965. In general owner-occupied households, white households, and households with male heads were found to have higher incomes than renter households, nonwhite households, and households headed by a female. Continuing inflation and increases in the costs of living made it more difficult for households with fixed or only slowly increasing incomes to obtain standard housing at reasonable costs.

Ownership:

In 1950 in the Boston SMSA there were 646,100 occupied housing units of which 45 percent or 287,900 units were owner-occupied. By 1960, 52 percent of the total 770,500 occupied units were owner-occupied. The highest proportion of owners was found in the 45-64 age groups. Large families were more frequent owners than



small families, and the rate of home ownership increases as household income increases. Despite the general trend toward home ownership, the number of lower income home owners decreased during the decade. The decrease in the number of lower income home owners is probably due to rising costs rather than to preference. It suggests the need for an increase in the number of low-cost units for home ownership.

Renters:

The number of occupied rental housing units in the Boston SMSA increases from 358,300 in 1950 to 367,700 in 1960. The proportion of renter households, however, decreased from 55 percent of all occupied units in 1950 to 48 percent in 1960. In 1960 approximately 128,500 renter households or 35 percent of all renter households in the Boston SMSA were paying more than 25 percent of their incomes on housing. Renter households paying more than 25 percent of their incomes for housing, especially when their incomes are low or moderate, are probably sacrificing other necessities.

Family Budgets:

In the Boston metropolitan area in 1966 a city worker's family of four was estimated to need \$10,141 a year and a retired couple \$4,298 a year to maintain a moderate standard of living. This compares to a median income for the Boston SMSA in 1965 of \$7,280. Using the family budgets, a city worker's family spent 29 percent of its income on home ownership and 21 percent on rental housing. A retired couple was estimated to spend 37 percent of income on either ownership or rental. These percentages compare with recent Federal guidelines of 20 percent of income for ownership and 25 percent for rental.

# Housing Supply, 1950 to 1960

Condition:

In 1950 in the Boston SMSA 87.8 percent of the total 653,161 housing units were not dilapidated with all plumbing. Units which were not dilapidated but lacked some or all plumbing were 8.4 percent of the total, and dilapidated units were 3.8 percent of the total. By 1960 the number of units had increased to 747,744, and the condition of units had improved. Of the total housing units 91.9 percent were not dilapidated



with all plumbing, 5.8 percent were not dilapidated but lacked some or all plumbing, and 2.3 percent were dilapidated.

In 1960 housing units can be described in terms of standard, deficient, and substandard con-In the Boston SMSA in 1960 nearly 85 percent of the occupied units were in standard condition, that is, structurally sound with all plumbing facilities. Deficient units, these which were sound but lacked some or all plumbing or deteriorating with all plumbing equalled 11 percent, and 4 percent of the occupied units were substandard, that is deteriorating lacking plumbing or dilapidated. Owner-occupied housing was nearly 7 percent deficient or substandard, while renter occupied housing was 23 percent deficient or substandard. Among other implications, this suggests that home ownership results in higher levels of maintenance.

Costs:

Units costs rose sharply between 1950 and 1960. Among units in the Boston SMSA for which records were available for both 1950 and 1959, median value of single-family homes rose by 49 percent from \$10,200 in 1950 to \$15,200 in 1960, and median rents rose by nearly 58 percent from \$52 to \$82. This compares with an increase in median incomes for the Boston SMSA between 1950 and 1960 of 68.6 percent. The rapidly increasing costs of housing, especially for households with fixed or only slowly increasing incomes demonstrates the need for lower cost housing for rental and ownership.

New Construction: The annual rate of new construction rose from 11,255 units in 1950 to 14,603 units in 1960. Construction of new housing took place at an increasingly faster rate than growth in number of households, indicating the replacement of substantial numbers of old, obsolete, and substandard units. Since 1955 the rate of single-family construction has decreased, while the rate of multifamily construction has increased. The costs of new private residential construction increased by about 73 percent over the decade, while the costs



of public housing construction during the same time increased by only 44 percent. The price of raw land increased by approximately 19 percent a year between 1950 and 1968, and the price of finished lots increased by 10 percent a year during the same period.

# Losses and Gains:

Between 1950 and 1960 there was an average annual loss of 4,550 units to the housing stock in the Boston SMSA. Of these, approximately 1,400 were the result of demolitions, 950 from mergers, and 2,200 were lost from other causes such as by disaster. During the same period approximately 2,000 units were added to the housing stock each year as a result of the conversion of existing units. The losses and gains resulted in a net loss to the housing stock, excluding new construction, of about 2,500 units a year.

# Annual Change:

The various gains and losses to the housing stock in the Boston SMSA, including new construction, resulted in an annual net gain of 8,763 housing units during the period 1950 to 1968. In the HMA in 1966 there were 969,998 housing units, the result of an annual net gain between 1960 and 1966 of 13,272 units.

# Housing Demand, 1960 to 1980

## Population:

The population in the HMA is expected to increase by 21 percent between 1960 and 1980 to a total of 3,393,000 persons. Except for the core communities all sectors of the metropolitan area will experience population growth resulting in an increase in the number of households and the demand for housing. The population of the Core communities is projected to decrease by nearly 11 percent from 1,030,300 persons in 1960 to 920,900 persons in 1980.

#### Households:

Households are projected to increase by 23 percent to a total of 1,019,800. Nonwhite households will undergo the greatest increase; 96 percent for families and 83 percent for individuals. It is expected that household size will decrease over the projection period,



implying a need for more units to house the same number of people.

Incomes:

Household incomes in the HMA are projected to increase in terms of 1960 dollars to a median of \$11,200 for white households and a median of \$7,900 for nonwhite households by 1980. The number of low and moderate income households is expected to decline from 544,000 in 1960 to about 309,000 in 1980, or to about 30 percent of all households.

Tenure:

By 1980 in the HMA 636,900 households, or 62 percent of the total, are expected to be owner-households. This represents a considerable increase in owner-occupancy and a decrease in renter-occupance to 38 percent from 1960.

Owner-occupancy is projected to increase among all income groups but the lowest ones. As in the past, the decline in low-income home ownership is attributed to rising costs rather than to preference. It suggests a continuing need for additional low-cost units designed for owner-occupancy.

### Housing Supply, 1960-1980

Condition:

The number of housing units in the HMA is projected to increase between 1960 and 1980 by 213,300 units, or 24 percent, to a total of 1,091,100 units. In 1960, 85 percent of the stock was considered standard, while by 1980, 88 percent of the stock is expected to be standard. However, the number of deficient and substandard units is projected to remain nearly constant from 1960 to 1980, from 128,100 in 1960 to 128,900 in 1980. This indicates that greater efforts to rehabilitate and maintain existing housing will be required.

Costs:

The values and rents of the housing stock in the HMA are expected to increase during the projection period. In 1960 approximately 24 percent of all single-family owner-occupied units were valued at more than \$20,000. By 1980 units valued at \$20,000 or more, in 1960 dollars, are expected to increase to 39 percent of the total. Monthly rents, in 1960 dollars, are also projected to increase. In 1960, 48



percent of all renter units rented for less than \$80 a month. By 1980 this percentage is expected to decrease to 36 percent.

### New Construction:

Between 1960 and 1969 the projected annual rate of new construction was about 15,000 units. This rate is expected to increase between 1970 and 1979 to approximately 19,600 units a year. Single-family owner-occupied units are estimated to account for 58 percent of all units.

Because units built between 1960 and 1980 are projected to equal approximately one-third of all housing units in 1980, the costs of new units have an important influence upon the housing market. The average projected sales price of a new single-family unit in the HMA in current dollars is expected to be \$28,000 in 1970 and \$36,500 in 1980. In 1960 the average price for a comparable unit was \$19,000.

# Losses and Gains:

In addition to new construction, the total supply of housing will be affected by demolitions and other losses such as fires. Annual losses are projected to be nearly 7,000 units a year during the projection period. Demolitions will account for about 48 percent of all losses. Because the values of units lost are generally lower than average values, and because units gained are more highly valued than the average, lower income families will have an increasingly difficult time obtaining standard housing.

## Annual Change:

The total supply of housing in the HMA is projected to increase by 24 percent between 1960 and 1980 to a total of 1,091,080 units. The increase represents a net addition of 8,800 units annually between 1960 and 1969, and 12,500 units annually between 1970 and 1979.



#### INTRODUCTION

This report has been prepared as part of a metropolitan housing study for the Boston area conducted by the Metropolitan Area Planning Council.

The study is being financially assisted through a planning grant from the U. S. Department of Housing and Urban Development, and a grant from the Committee of the Permanent Charities Fund, Inc.

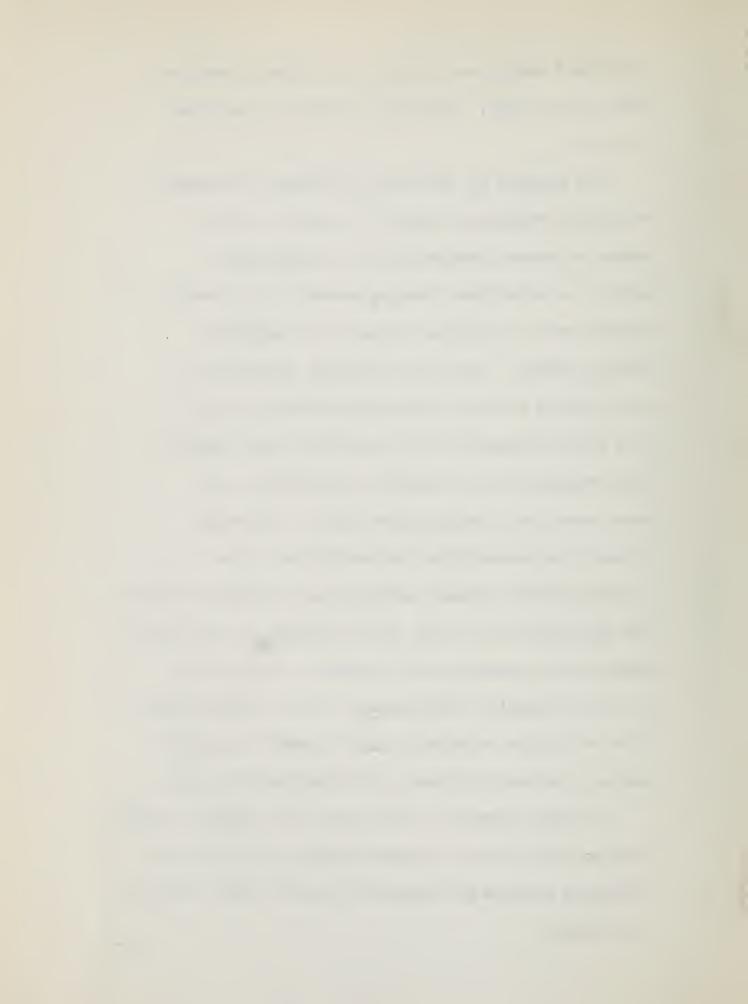
The report addresses itself to the characteristics of housing demand and housing supply in metropolitan Boston during the period 1950 to 1980. It presents historic, current, and projected housing data for a metropolitan market area comprising the 92 communities in the Council District at the initiation of the study. The components of housing demand - population, households, income, tenure, and expenditures - and the components of housing supply - structural condition, costs, new construction, and conversions and removals from the stock - are analyzed. These components of



demand and supply are studied for historic patterns from 1950 to 1967, and future trends are projected for 1980.

The purpose of the study, of which this report on housing demand and supply is a part, is to determine future housing needs in metroplitan Boston, to anticipate housing demand in the coming decade, and to evaluate programs for improving housing supply. Data was collected, aggregated, and analyzed for the metropolitan housing market as a whole, because of the conviction that housing, like transportation, economic development, and open space, is a metropolitan issue. The study attempts to demonstrate that solutions to the housing problem require metropolitan awareness, concern, and participation as well as the efforts of individual communities, agencies, and builders. The quality of the metropolitan environment will be substantially affected by the commitment made to providing decent housing for every citizen in the metropolitan area.

The next report in this study will examine critical housing needs, review present housing policies, and recommend programs for improving housing supply, choice, and quality.



#### HISTORICAL HOUSING PATTERNS

The historical period chosen to describe housing patterns in the Housing Market Area (HMA) is 1950 to 1966. In this time framework changes in the types of housing demand and changes in the total stock of housing supply are discussed in detail.

Data are based on U. S. Census materials from 1950 and 1960 and MAPC population studies. Other sources of information are noted in the text.

Included in the discussion of historical patterns of housing demand and supply are descriptions
of population, household, income, tenure, and expenditure patterns as well as details of present housing
supply, condition, costs, and rates of new construction or losses to the housing stock.



#### CHARACTERISTICS OF HOUSING DEMAND

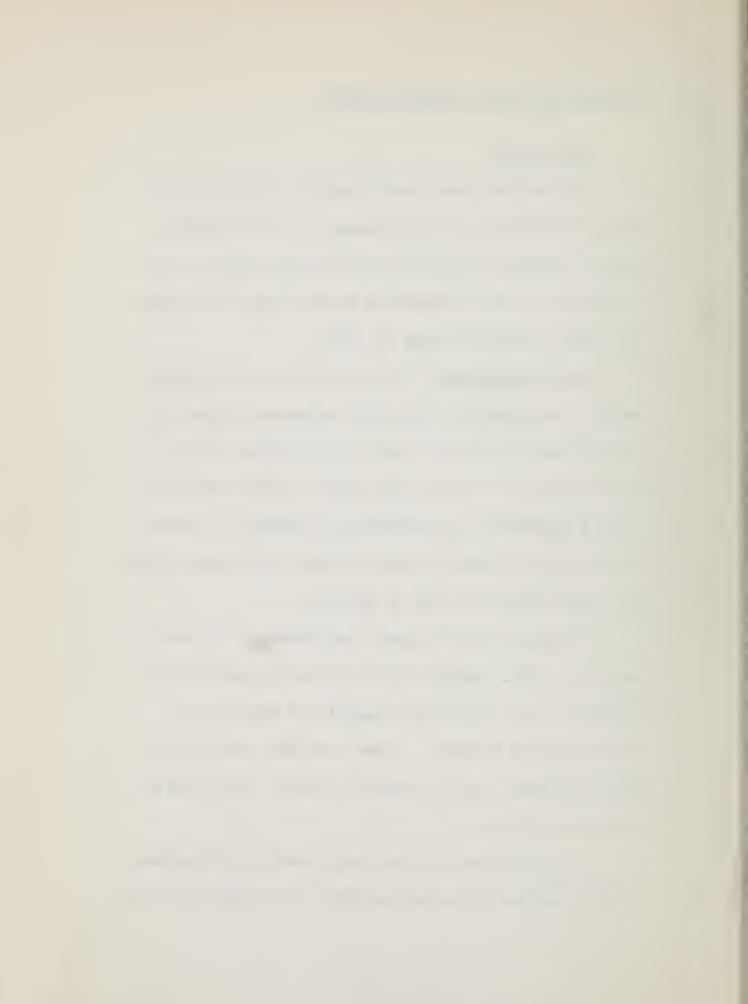
#### Population

Population trends are important indicators of present and future housing demand. The following section discusses historic population trends in the Commonwealth and the Housing Market Area with emphasis upon the period 1950 to 1960.

Historic Trends: The population of the Common-wealth has undergone continual expansion since the first Census in 1790. The City of Boston set the pace of growth in the decade 1830 to 1840 when the City's population increased by 52 percent. During the following decade, 1840 to 1850, the State reached its peak growth rate of 35 percent.

Varying rates of growth continued to be recorded until 1960. Before 1910 the average population growth for the State and the City of Boston per decade was 20 percent. Since then the growth rate has decreased, with a current rate for the State of about 10 percent.

In the decade 1950 to 1960, when the 10 percent growth for the State was recorded, the population of

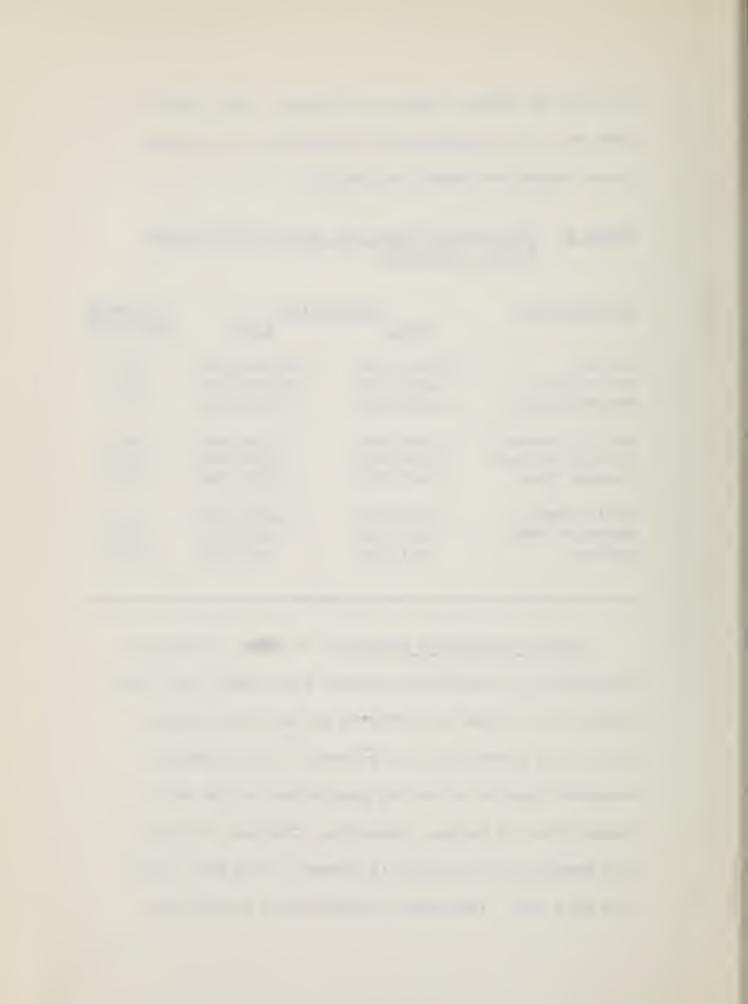


the City of Boston began to decline. From 1950 to 1960 the City's population decreased by 13 percent. These trends are shown in Table I.

Table 1: Population Trends for Boston and Related Areas, 1950-1960

Popula	% Change	
1950	1960	1950-1960
151,325,798	179,323,175	18.5
9,314,453	10,509,367	12.8
4,690,514	5,148,578	9.8
2,580,900	2,798,300	8.4
1,109,400	976,900	-11.9
1,471,500	1,821,400	23.8
2,410,572	2,595,500	7.7
119,728	149,458	24.8
801,444	697,197	-13.0
	1950 151,325,798 9,314,453 4,690,514 2,580,900 1,109,400 1,471,500 2,410,572 119,728	151,325,798 179,323,175 9,314,453 10,509,367 4,690,514 5,148,578 2,580,900 2,798,300 1,109,400 976,900 1,471,500 1,821,400 2,410,572 2,595,500 119,728 149,458

Recent Population Changes: As shown in Table I population in the Housing Market Area (HMA) grew from 2,580,900 in 1950 to 2,798,300 in 1960, an increase of 217,400 persons or 8.4 percent. This increase occurred despite a loss of population in the core communities of Boston, Cambridge, Chelsea, Everett, and Somerville of nearly 12 percent. The HMA, minus the core area, increased in population during this



period by 23.8 percent.

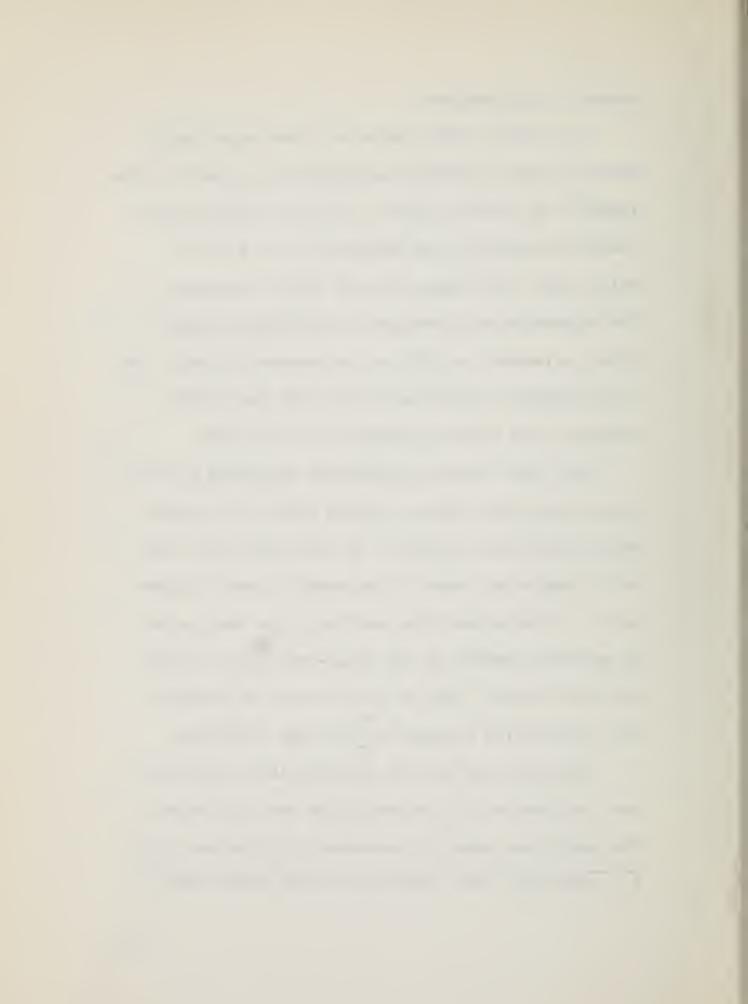
from 1950 to 1960 there was a net outmigration from the Boston standard metropolitan statistical area (SMSA)<sup>1</sup>· of 106,530 persons. This net figure represented the sum of a net outmigration of 136,740 whites and a net inmigration of 30,210 nonwhites. The proportion of nonwhites in the SMSA increased from 2.4 percent in 1950 to 3.4 percent in 1960. The total nonwhite population of the SMSA was 87,104, compared with a white population of 2,508,377.

The total nonwhite population increased by 55.5 percent over the decade compared with a 6.4 percent white population increase. In particular, the non-white population under 15 increased by over 100 percent. In large part this was due to an inmigration of nonwhite females in the child-bearing age groups over the decade. Most of the increase of the non-white population occurred in the City of Boston.

Migration and natural increase also altered the age distribution of the population over the decade.

The population under 20 increased by 26 percent, and

<sup>1.</sup> Based upon 1964 definition of the Boston SMSA.



the population over 65 increased by 20 percent.

While the population aged 20 to 65 actually decreased by about 50,000 over the decade, the rate of new construction and the growth of the housing stock continued to increase. This increase in housing stock is probably related to the fact that more persons were forming their own households rather than doubling up with relatives.

Relationship of Population Trends to Housing

Demand: Within the HMA the move away from the core

communities to the suburbs was influenced by many

factors, which affected housing demand and supply.

Among the factors influencing moves were rising

incomes, improved highways, easier mortgage financing tools, newer housing, and better school facilities.

This major migration pattern of white families from the city to the suburbs vitally affected housing patterns in the cities. For one thing, the outmigration from the core meant that overcrowding in these communities was reduced significantly. Middle-class competition for rental units decreased somewhat, and low-income families may not have experienced the same

- 7 -

This reduced demand, however, also meant that investments in housing and community facilities were channeled away from the core communities and into the
suburbs. Obtaining mortgage financing or property
insurance in the core became increasingly difficult,
and signs of blight became evident.

The continued decay and decline within the core
thus balanced the vigor of the suburbs. The core
found itself with increasing proportions of low-income,
elderly, and nonwhite families. Employment centers
and modern shopping centers also moved to the suburbs,
further aggravating the problems of the low-income
city dweller with inadequate resources to commute to
the suburbs for shopping and employment.

These white and nonwhite migration patterns have contributed to the increasing concentration of lower-income whites and nonwhites in the core. This pattern is one which greatly influences housing demand, and will be discussed throughout this study.

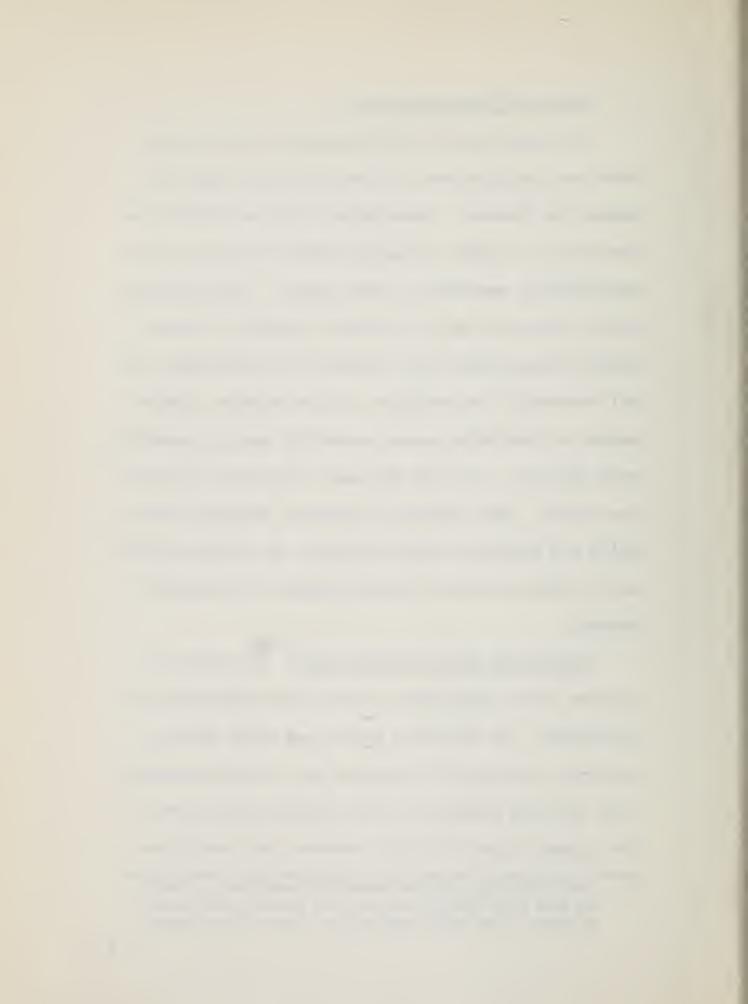


#### Household Characteristics

The distribution of the population into households and families has a direct influence upon the demand for housing. Households, which are defined as that group of people occupying one housing unit, are particularly important in this regard. Families and family sizes are not as directly related to housing demand because while all families are households, not all households are families. As an example, singleperson or unrelated-person households are not considered families, yet they obviously contribute to housing demand. This section, therefore, stresses households and household characteristics in its discussion of the relationship of housing demand and household trends.

Households and Household Heads: In 1950 94.6 percent of the population in the Boston SMSA lived in households. In 1960 this figure had grown to 96.1 percent, including 96.2 percent for the white population and 95.4 percent for the nonwhite population. 1. The higher figure for 1960, however, may merely re-

<sup>1.</sup> The 1950 data in the Household section is based on the 1950 definition of the Boston SMSA which differs from 1960 definition. The 1950 defini-



flect a change in the definition of a household in 1960, which somewhat expanded the type of quarters counted as housing units. 2. It is likely that there was no trend over the decade, and that the proportion of the population in households remained fairly constant.

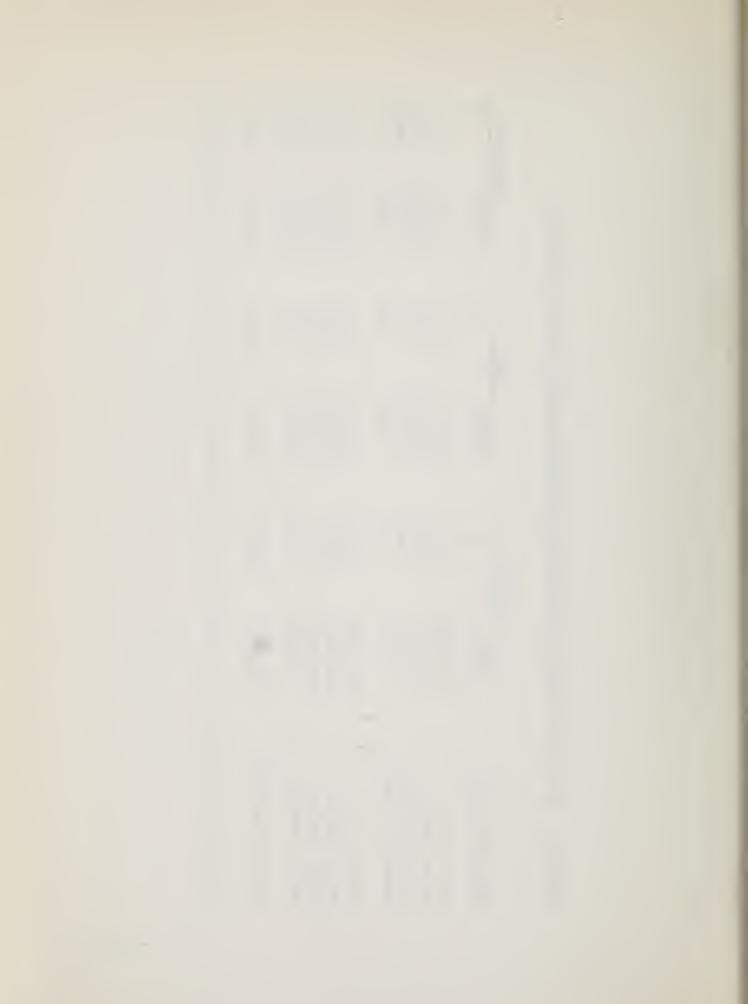
In the Boston SMSA the household headed by a white male was the predominant type, but the proportion of all households that fell into this category shrank from 79.6 percent in 1950 to 76.8 percent in 1960, as shown in Table 2. The other three categories, white female, nonwhite female, and nonwhite male, all grew more rapidly than the white male, and increased their percent of the total during this time.

tion does not include 12 communities included in the 1960 definition, but these communities in 1950 had only 40,586 persons or 1.7 percent of the population of the Boston SMSA. In 1960 these communities contained 76,230 persons, or 2.9 percent of the SMSA population, 1960 definition. It is felt that comparisons of 1950 and 1960 households in the Boston SMSA are meaningful because the 12 communities added to the 1960 definition are only a small percentage of the total.

<sup>2.</sup> See List of Definitions, p. x.

Table 2: Characteristics of Heads of Households, Boston SMSA, 1950-1960

Increase	15.6 31.0 75.1	16.8 33.2 18.5 80.4	19,9
Inc. Total	80,024 36,027 7,813 3,929	87,837 39,956 116,051 11,742	127,793
780	76.8 19.8 2.4 1.1	79.2 20.8 96.6 3.4	100.0
Total	591,829 152,292 18,218 8,129	610,047 160,421 744,121 26,347	770,468
1950	79.6 18.1 1.6	81.3 18.7 97.7 2.3	100.0
Total	511,805 116,265 10,405 4,200	522,210 120,465 628,070 14,605	642,675
Household Head	White male White female Nonwhite male Nonwhite female	Total male Total female Total white Total nonwhite	Total households:

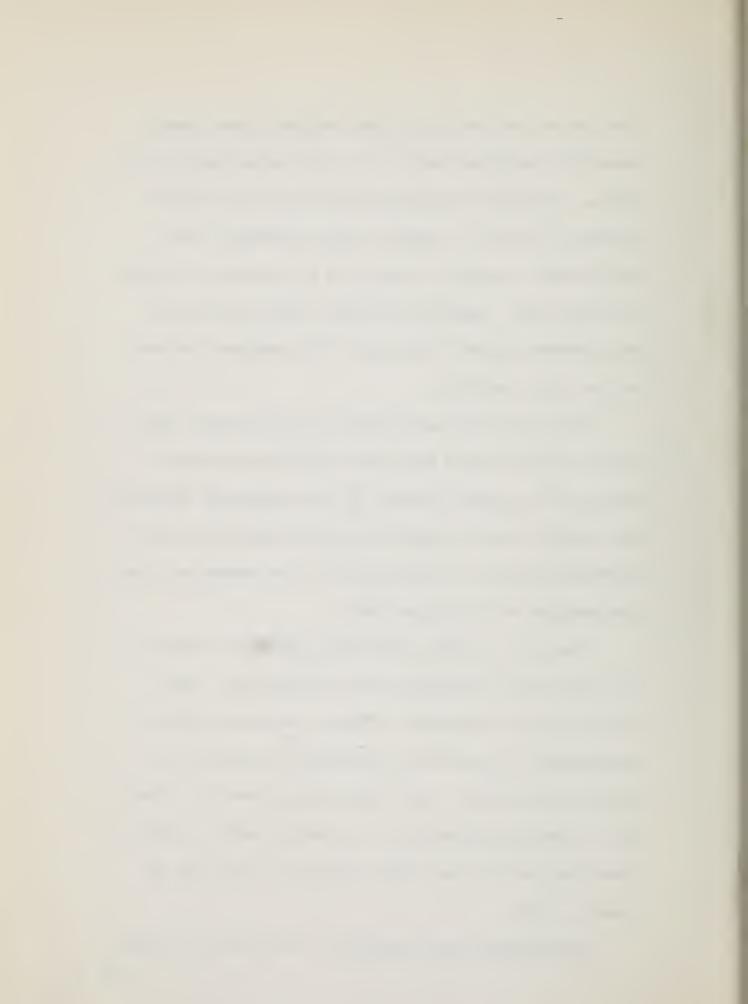


Statistics for the Boston SMSA indicate that female household heads increased at a rate twice that of the males. Nonwhites increased more than four times as quickly as whites. Despite their percentage loss white males increased absolutely 15.6 percent between 1950 and 1960. Nonwhite females, while increasing 93.5 percent during the decade, were but one percent of the total in 1960.

Both the white and nonwhite distributions indicated a trend toward more young and old household
heads with a slight decline in the middle-age category.
The nonwhite shift toward the young household heads,
however, clearly was influenced by the extensive young
inmigration to the Boston SMSA.

There is a marked similarity among the nonwhite and white male household head distribution. Both begin to form households in their twenties, and both experience a large drop in household formation in their late fifties. For black males, however, there was a growing proportion of household heads in their twenties, so that more than half were less than 45 years of age.

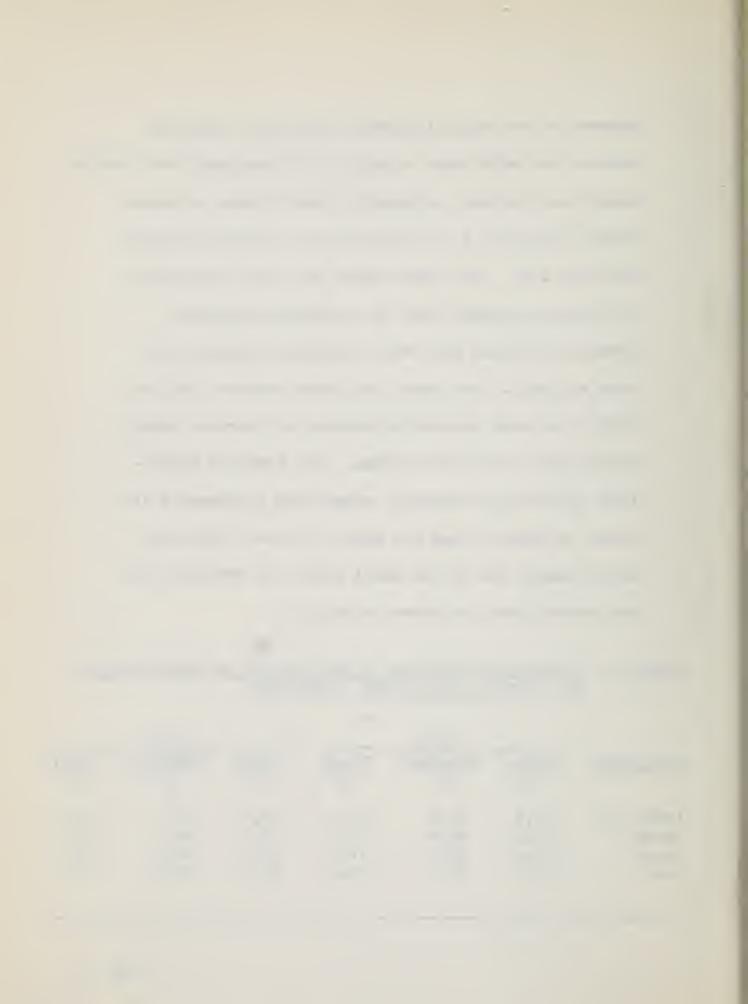
Householdsby Race and Age: Whites have a higher



percent of the total household headships than nonwhites; and males have a higher total percent than females. Nonwhites, however, especially female heads of households, witnessed a very high percent increase between 1950 and 1960. Yet when broken down into age groups, it becomes apparent that the nonwhite population changes influence the total population figures only very slightly. For every age group between 1950 and 1960, the total household increase or decrease always paralleled that of the whites. The nonwhite population increase or decrease, often more substantial in terms of percent than the white, did not affect the total change due to the small number of normhites in the Boston SMSA, as shown in Table 3.

Table 3: Percent Distribution of Total Heads of Households by Age Groups, Boston SMSA, 1950-1960

	1950			1360		
Age Group	White	Nonwhite	Total	White	Nonwhite	Total
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Under 30	10.5	15.6	10.7	10.9	18.3	10.8
30-45	31.3	34.4	31.3	30.1	38.4	30.4
45-60	32.0	28.5	31.9	30.2	24.5	30.1
60+	26.2	21.2	26.0	28.9	18.9	28.4



A comparison between the changes in the distribution of white and nonwhite households by age groups from 1950 to 1960 shows a growing disparity between white and nonwhite households. Between 1950 and 1960 white household heads less than 30 years of age increased their distribution only slightly, from 10.5 percent in 1950 to 10.9 percent in 1960. Nonwhite household heads under 30 increased from 15.6 percent to 18.3 percent during this same time. Considerable differences were also apparent in white and nonwhite households with heads over 60 years. Among white households in this category the percent distribution increased from 26.2 to 28.9 between 1950 and 1960. Nonwhite households in this group actually decreased during this time, from 21.2 percent to 18.9 percent. The largest percent of all white households in 1960 was in the 45 to 60 year age group, whereas the largest percent of nonwhite households was in the 30 to 45 age group.

The chief reasons for this growing disparity can probably be found among the nonwhite household heads. Inmigration of relatively young nonwhites has skewed the age distribution toward younger household heads,

while decreasing the percentage of household heads over 60 years of age. The greater number of young household heads among the nonwhite population is also accounted for by the combination of early marriages and separate female household heads.

The nonwhite and white female household head trends differ considerably. The white female distribution complements that of the white male. Most white female household heads are over 50 when, through mortality, male household heads decline. The non-white female household head distribution, in contrast, is markedly similar to that of the nonwhite male. The nonwhite female household heads are generally between 30 and 45 years of age, the same category in which the nonwhite male household heads are concentrated.

Changes in Household Size: Between 1950 and 1960 the median population per household went from 3.46 to 3.23 in the Boston SMSA. Essentially, this implied that more houses were required to shelter the same number of people. Several explanations for the decline of the median household size have been advanced. The first is that changes in life expectancy are resulting in people living longer, thus pro-

ducing more small, elderly households. A second reason is that changes in living patterns are resulting in more young, single people as household heads, elderly individuals and couples maintaining separate households, and higher divorce rates creating more households. A third is the general tendency toward smaller families.

The household trends from 1950 to 1960 have several implications. Elderly individuals and couples, frequently with female household heads, are maintaining separate households. Young people are forming households, often single-person households, at earlier ages. The black population is younger, marries earlier, and has more female heads of households relative to the white population. These tendencies toward more and smaller households increase the pressures for housing beyond the demand engendered solely by population growth.

## Income

Household income is a basic component of housing demand. Increasing incomes imply an increasing ability to afford higher cost housing, and fixed or decreasing incomes suggest a demand for lower cost units. Income trends indicate what kinds of housing demands will be expressed by what segments of the population, and where particular housing problems will arise.

Data on income distribution and income changes has been taken from two sources, the U. S. Census of Housing 1950 and 1960 and a sample survey of households in the Boston metropolitan area made by the United Community Services in 1965. In both sources the data covers the Boston SMSA. Income figures are given in current dollars, except where otherwise specified.

Income Distribution, 1950 to 1960: In 1950 almost two-thirds of all households in the Boston SMSA had incomes of less than \$4,000. The largest percentage of households, 22 percent, had incomes within the \$3,000 to \$3,999 range. This concentration of households in the low-income bracket gave the Boston SMSA

a median income for that year of \$3,570. In the higher income categories a little over four percent of all households had incomes of \$10,000 or more.

evenly distributed. In 1960 less than one-third of all households had incomes of less than \$4,000. The largest percentage of households, 12.3 percent, had incomesbetween \$5,000 - \$5,999. The median income for 1960 was \$6,020, an increase of \$2,450 or 68.6 percent over the 1950 median. The number of households having incomes of \$10,000 or more rose to 18.1 percent.

These figures, as given in Table 4, demonstrate significant changes in income occurring during the decade. The number of households with income of less than \$4,000 decreased considerably, from 372,440 in 1950 to 211,186 in 1960. Median incomes rose from \$3,570 to \$6,020, and the number of families with incomes over \$10,000 increased to more than 18 percent. The data alone suggest that in 1960 households could afford better housing. The accuracy of this

<sup>1.</sup> The 1950 census data includes "nonfarm" housing units only; whereas, the 1960 characteristics include all housing units.

implication is clouded by the influence of inflation on income and the cost of living. The increasing costs of living during the decade meant that in 1960 households with low incomes still had a difficult time obtaining decent housing.

Table 4: Percent Distribution of Income for Total Households, Boston SMSA, 1950-1960

Income	<u>1950</u> <u>%</u>	<u>1960</u> <u>%</u>
\$ 0-999	10.8	6.0
1000-1999	10.4	6.6
2000-2999	19.1	6.7
3000-3999	22.0	8.1
4000-4999	13.4	10.1
5000-5999	8.9	12.3
6000-6999	4.9	10.6
7000-9999	6.2	21.5
10,000+	4.3	18.1

Trends for cwner-occupied households in the SMSA are similar to those for all households. In 1950 more than 51 percent of the owner-occupied households had incomes less than \$4,000; the median income was \$4,150. The largest percentage of households, nearly 21 percent, had incomes within the \$3,000 - \$3,999 range.

Only 7.7 percent of all owner-occupied households had

income over \$10,000.

In 1960 income for owner-occupied households was more evenly distributed. Only about one-fifth of owner-occupied households had incomes less than \$4,000, and households with incomes of \$10,000 or more rose to nearly 27 percent. Nearly 23 percent of all owner-occupied households had incomes between \$5,000 - \$6,999, and 26.2 percent had incomes between \$7,000 - \$9,999. The median income increased significantly by 80 percent to \$7,300.

In 1950 approximately 70 percent of all renteroccupied households had incomes of less than \$4,000.

The 1950 median income among renter households was
\$3,200. Only 1.8 percent of these households had
incomes over \$10,000. In 1960 the income distribution for renter households increased, and the median
income reached \$4,840, an increase of over 51 percent.

While the largest percentage, 18 percent, occurred in
the income range of less than \$2,000, a significant
16 percent were in the \$7,000 - \$9,999 range. There
was also an increase to 8.7 percent in households
with incomes of \$10,000 or more. These trends are
shown in Table 5.

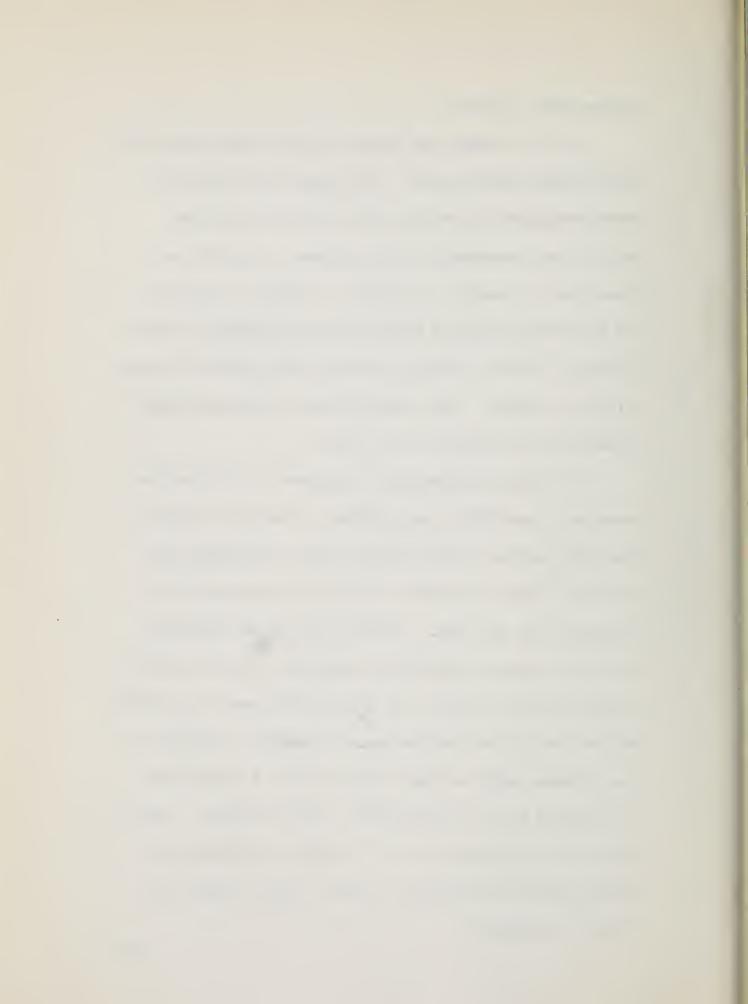


Table 5: Percent Distribution of Owner and Renter-Occupied Households, Boston SMSA, 1950-1960

	19	50	19	60
Income	Renter	Owner	Renter	Owner
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
\$ 0-999	12.1	9.2	9.1	3.7
1000-1999	12.9	7.3	9.1	3.7
2000-2999	22.9	14.2	9.7	4.0
3000-3999	23.1	20.6	11.4	5.2
4000-4999	12.4	14.8	12.8	7.6
5000-5999	7.5	10.6	13.3	11.4
6000-6999	3.6	6.5	9.8	11.3
7000-9999	3.7	9.1	16.1	26.2
10,000+	1.8	7.7	8.7	26.9

Income by Household Type, 1960: Among primary families<sup>1</sup> in the SMSA the 1960 income distribution is fairly even as shown in Table 6. Almost 26 percent have incomes between \$5,000 and \$6,999, with the median in the \$6,000 - \$6,999 range. Only 11 percent of primary families had incomes under \$3,000.

The income distribution for primary individuals<sup>2</sup>·
in the Boston SMSA in 1960 is significantly lower.
Sixty percent had incomes under \$3,000, and the
median was less than \$3,000.

Primary families include two parents and one or more children.

Primary individuals are unrelated individuals who are household heads.

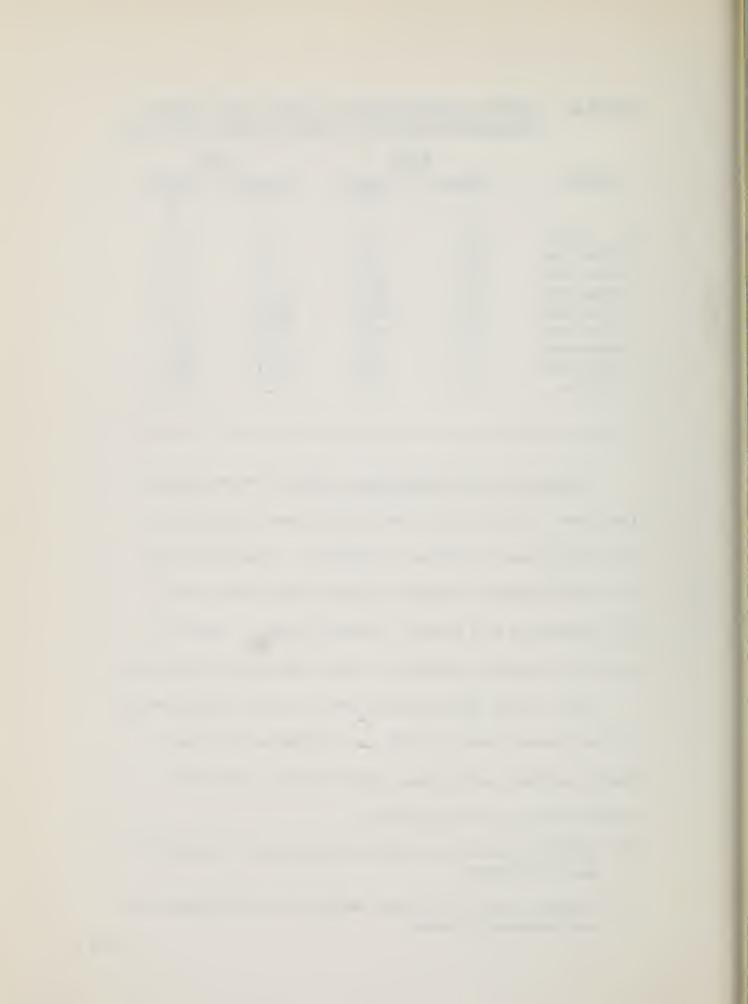


Table 6: Percent Distribution of Income and House-hold Composition, Boston SMSA, 1960

Income	% Primary Individuals	% Primary Families
\$ 0-999	20.0	3.7
1000-1999	20.0	3.6
2000-2999	20.0	3.7
3000-3999	11.5	8.6
4000-4999	11.5	8.6
5000-5999	5.1	12.7
6000-6999	5.1	12.8
7000-9999	3.9	24.9
10,000+	3.0	21.4

Considerable differences exist between the incomes of white and nonwhite households. The income distribution for all white households is weighted toward the higher income brackets. A large proportion, 21 percent, occurs in the \$5,000 - \$6,999 income range, with the median income at \$6,110. Only about one-third of the white households had incomes under \$4,000.

The nonwhite household income distribution was oriented toward the low-income categories. About 60 percent had incomes under \$4,000, and the median income was only \$3,610, or a little more than half of the median for white households. Only 4.6 percent of the



nonwhite households were in the \$10,000 or more income range. Whereas the income distribution in 1960 for white households was fairly even, it was decreasing sharply for nonwhite households, as shown in Table 7.

Table 7: Percent Distribution of Incomes, White and Nonwhite Households, Boston SMSA, 1960

Income	% Nonwhite	% White
\$ 0-999	15.6	10.1
1000-1999	15.0	8.1
2000-2999	16.2	7.1
3000-3999	13.8	8.1
4000 <b>-</b> 4999 5000 <b>-</b> 5999	9 <b>.</b> 8 9 <b>.1</b>	9.6 11.3
6000-6999	6.3	9.7
7000-9999	9.6	19.4
10,000+	4.6	16.6

Changes in Income, 1960-1965; Over the period 1960 to 1965 incomes in the Boston SMSA continued to rise and become more evenly distributed. The proportion of primary families and individuals with low incomes, defined here as under \$5,000, declined by about eight percent over the period 1960-1965; and the proportion of households having incomes of \$10,000 or more increased by seven percent during the five year period. Table 8 shows the estimated



changes in income distribution during the period 19601965, based upon a sample survey of households in the
Boston metropolitan area conducted by the United Community Services in 1965. Households with incomes
between \$5,000 - \$9,999 remained relatively stable,
about 45 percent, over the five year period. The
median income in 1965 was \$7,280, an increase of
\$1,260 or nearly 21 percent over the 1960 median.

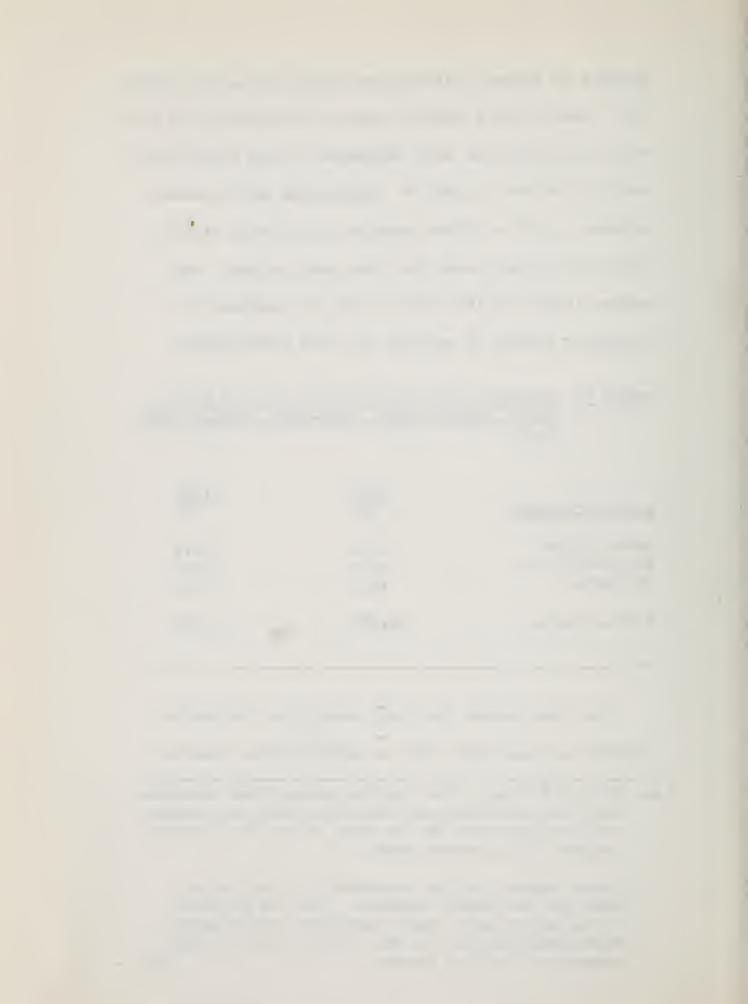
Table 8: Percent Income Distribution, Total House-holds, Boston SMSA, 1960-1965, Current Dollars

Income Category	<u>1960</u> <u>%</u>	<u>1965</u> <u>%</u>
<pre>Under \$5,000 \$5,000-\$9,999 \$10,000+</pre>	37.4 44.4 18.2	29.2 45.6 25.2
Median Income	\$6,020	\$7,280

The data shows that most people had increasing incomes and many were able to afford better housing

Eleven percent of the households in the U.C.S. study did not report incomes. For the purposes of the MAPC study, these households were distributed proportionate to the distribution of those households that did report.

<sup>1.</sup> The 1965 U.C.S. data for the Boston SMSA excludes the town of Stoughton, with less than one percent of the households in the SMSA, which is included in 1960 U.S. Census data.



in 1965. However, increases in "real" income, measured by purchasing power, were not as great. While incomes in current dollars were rising by 21 percent, the cost of living index rose by almost nine percent during the same period. The specific cost of living indexes for housing rose even more rapidly, 12.8 percent for home ownership and 12.1 percent for rents. 1. This indicates that for the average household with an employed head, income in current dollars was rising more rapidly than living costs. However, for many households on fixed, declining, or only slowly growing incomes, inflation was making it significantly more difficult to afford the costs of decent housing.

In the City of Boston, as well as in the SMSA, household incomes increased over the five-year period 1960-1965. The proportion of households with incomes under \$5,000 declined by 10.7 percent during the period and the proportion of primary families and individuals with incomes between \$5,000 - \$9,999 increased by 10.5 percent. The proportion of house-

Source: consumer Price Index data for home ownership and rent, Boston, Massachusetts Area, U. S. Department of Labor, Bureau of Labor Statistics.
 (Base 1957-1959=100)



holds having incomes greater than \$10,000 remained steady in current dollars. This indicates that, if inflation had been taken into account, the proportion of households in this high income group had decreased somewhat, probably as a result of continuing outmigration of upper income households. The cost of living indexes for the City for rent and home ownership rose approximately 12 percent during this period, while median income of primary families and individuals rose just over 14 percent, indicating only a very slight gain in buying power for the median household during this period relative to housing. Table 9 shows the change in income distribution in the City of Boston for all primary families and individuals during the period 1960-1965.



Table 9: Percent Income Distribution for Total Households, City of Boston, 1960-1965

Income Category	1960 <sup>1</sup> •	1965 <sup>2</sup> •
Under \$3,000	29.0	19.6
\$3,000-4,999	22.3	21.0
5,000-5,999	12.5	15.6
6,000-7,499	12.9	18.6
7,500-9,999	12.8	14.5
10,000-14,999	7.8	8.2
15,000+	2.7	2.5
Median Income	\$4,900	\$5,600

<sup>1.</sup> U. S. Census, 1960.

In terms of current dollars incomes have shown a steady increase in Boston and the SMSA for the period under study, 1950-1965. When measured in constant dollars, however, the purchasing power of incomes is increasing at a relatively slow pace due to increases in the cost of living. In fact, in the City of Boston the median income in constant dollars for white households actually declined in this period. Table 10 below shows the change in income distributions of white and nonwhite two-or-more person households in current dollars and in constant 1959 dollars for

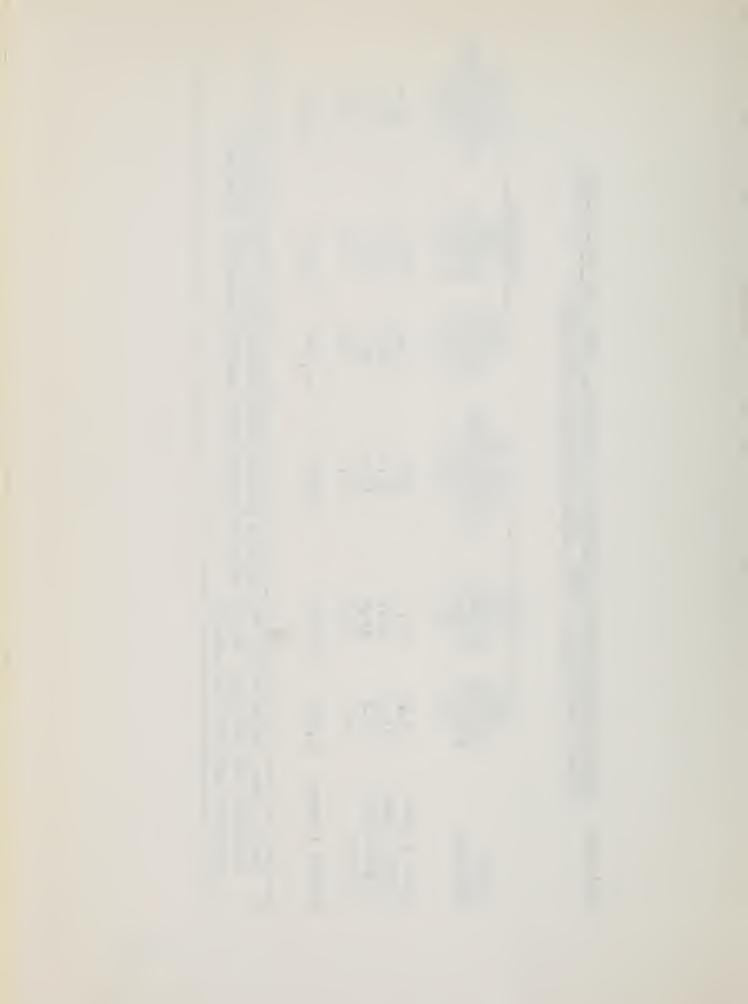
<sup>2.</sup> U. C. S. Survey, 1965.



Percent Distribution of Incomes of Families, 1959, and Two-or-More 1959-1964 Boston, City of Person Households, 1. 1964, Table 10:

1959 Constant Dollars	58.9 27.0 13.9 0.3	) ) j
Nonwhite 1964 Current Dollars	51.5 27.3 18.2 3.1	
1959 Current Dollars	59.8 24.3 10.5 5.4	000 <b>1</b>
1959 Constant Cu	35.9 41.4 11.5 11.5	
White 1964 Current Dollars	27.2 42.6 15.4 14.8	
1959 Current Dollars	36.8 31.7 17.1 14.4	
Income	Under \$5,000 \$5,000-7,499 7,500-9,999 10,000+	

U.C.S. data includes all two-or-more person households white U. S. Census data includes all families, which includes two-or-more person households provided that two members are related.



the City of Boston in 1959 and 1964.1.

If the U.C.S. sample was reliable and if the slight difference in the sample population was unimportant, the proportion of all families in the City of Boston with incomes under \$5,000 in constant 1959 dollars remained almost the same. For both families and two-or-more person households, however, there was a drop in the very lowest category, under \$3,000, and an increase in the \$3,000 - \$4,999 category. For both whites and nonwhites the proportion in the \$10,000 and over income category declined.

Median income in current dollars in Boston, calculated from the distributions shown in Table 10 was \$6,040 for white households in 1959, and \$6,338 for the same households by 1964. Measured in 1959 constant dollars, however, the median was only \$5,850 for white households in 1964. This indicates that in

<sup>1.</sup> The 1964 distribution in 1959 constant dollars was calculated by using an 11 percent increase in the cost of living index. The 11 percent increase represents the average change between 1959 and 1964, and is more appropriate when considering whole years than the 9 percent figure used to indicate the increase in the cost of living index between April, 1960 and April, 1965.



"real" terms median incomes of white households were declining, probably due to continuing outmigration from Boston of higher income households. For non-white households the median income was \$4,200 in 1959, \$4,850 in 1964 current dollars, and \$4,250 in 1964 in terms of 1959 constant dollars. Thus, while white incomes were actually declining, nonwhite incomes, although less than white incomes, appear to be remaining stable as measured in constant dollars.

Among the households of the Boston SMSA as a whole, owner-occupied households are shown to have a higher income level than renter-occupied households, although incomes of the latter group are increasing. Nonwhite households have incomes considerably lower than do white households. Among nonwhite households in 1960, 61 percent had incomes of less than \$4,000, while only 33 percent of the white households had incomes at this level. These figures suggest that low-rent housing units are going to continue to be in great demand, and that special attention must be given to these with fixed incomes and to nonwhite groups.



## Tenure

Tenure in housing refers to type of occupancy:

whether a dwelling unit is occupied by an owner or a

renter. The demand for housing by tenure depends upon

many interrelated factors. The composition of a

household as well as the age, income, sex, and race

of the head of the household have significant influences

on the tenure preferred and attainable by a particular

family.

Owner occupancy has been encouraged in the last two decades by government-sponsored mortgage programs, which enable families to purchase housing with low down payments and long amortization periods. Mort-gage insurance by the Federal Housing Administration and guaranteed loans from the Veterans Administration are two of these programs. Current patterns of tax-ation and mortgage interest rates also make home owner-ship economically competitive with renting for middle and high-income families.



Rental housing has, however, generally been preferred by young families and by single-person households. Recent building permit data, which shows a large increase in the construction of multifamily housing, may indicate that other household types as well may be preferring renter-occupancy. This resurgence in the construction of rental units has been particularly evident in the core communities.

Trends in housing tenure require examination to determine how well existing housing stock, programs, and policies can by expected to meet future demand for owner and rental housing.

Tenure, Household Size, and Income: In 1950 there were 642,700 1. occupied housing units in the Boston SMSA, of which 237,900 or 45 percent were owner-occupied. In 1960 the total number of units had increased to 770,500; 402,700 or 52 percent were owner-occupied. At all income levels, except for very low-income households, larger households had higher owner-ship rates than smaller households. This indicates that as household size increases, if income is adequate, home ownership is the preferred form of

<sup>1.</sup> All numbers in this section are rounded to the nearest hundred or to the nearest percent.



tenure. It follows that large low-income families have lower ownership rates than do higher income families. Table 11 shows the distribution of owner-occupancy by income and family size.

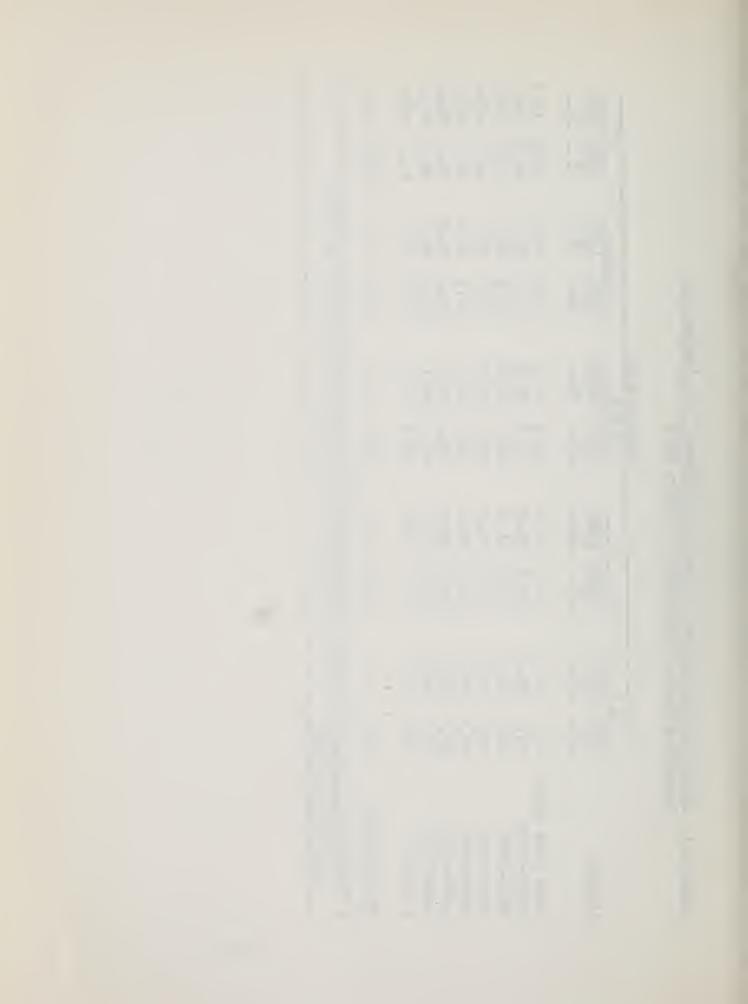
During the decade 1950 to 1960 some important changes related to ownership patterns occurred. By 1960 for all but two-person households, low-income home ownership rates had decreased, the greatest decreases occurring in the largest households. This indicates that home ownership was becoming increasingly difficult for low-income, especially large, households.

In 1950, 358,300 units, or over 55 percent of the total in the SMSA were renter-occupied. In 1960 the number of renter-occupied units increased to 367,700 units, but decreased to 48 percent of the total. In both years household size inversely affects tenure: as size of household increases, the percentage of renter-occupied units decreases. Additionally, as incomes increase, households are more likely to purchase housing. Trends in tenure and household size are shown in Table 12.



Percent Distribution of Owner-Occupancy by Income and Household Size, Boston SMSA, 1950 - 1960 Table 11:

					Famil	Family Size				
				2	ಶ ೯	4		5	+9	
Income	1950	1960	1950	1960	1950	1960 %	1950 %	1960	1950 1960 % %	1960
	1	1	1	1	1	0	1			C
Less than \$2000	25.9	25.3	35.1	40.7	35.8	32.2	31.9	30./	43.2	32.9
\$2000-2999	20.1	20.2	32.7	41.8	31.7	29.5	36.9	29.5	45.8	28.3
3000-3999	25.3	20.6	36.8	41.5	40.1	34.0	45.6	34.5	52.0	30.8
4000-4999	29.0	22.5	38.8	42.7	48.4	40.8	55.2	43.1	60,3	43.8
5000-5999	34.6	24.8	42.1	44.4	53.5	49.7	57.4	9.99	62.1	58.6
6669-0009	30.4	28.3	48.6	48.0	59.1	57.0	63,1	8.99	65.7	8.99
7000-7999	27.0	30.2	54.5	53,1	65.8	65.1	70.3	74.4	70.5	75.8
10,000 +	47.3	32.4	9.99	0.69	78.9	78.2	83.5	83.5	82.6	84.0
Not reported	27.2	ļ	43.4		54.5	1	61.8		66.5	l
1. Total percentage of owner occupancy for all households was 44.1 in 1950	tage o	f owner	occupan	cy for	all hous	eholds w	as 44.1	in 1950		
and 52.3 in 1960	1960									



Number and Percent Distribution of Households by Tenure and Size, 1950 - 1960 Boston SMSA, Table 12:

1960 Total Occupied Units Owner Renter	%	75.9	51.5	45.8	38.9	33.5	32.0	47.7
	No.	87,358	104,905	67,253	51,786	30,066	26,355	367,723 323,923
	%	24.1	48.5	54.2	61.0	66.5	0.89	52.3 55.4
	No.	27,745	98,655	79,551	81,193	59,670	55,931	402,745 402,745
nits	%	73.5	61.2	56.5	52.4	46.4	46.6	55.5
1950 Total Occupied Units	No.	41,177	99,791	83,822	67,478	35,921	30,106	358,295
	%	26.5	38.8	43.5	47.8	53.7	58.4	44.6
Owner Owner	No	14,826	63,278	64,615	61,223	41,582	42,337	287,861 :d:
	Household Size	1 1 Adjusted <sup>1</sup> .	2	m	4	22	+ 9	Total: 287, Total Adjusted:

Estimated adjustment to eliminate certain households added by definition Adjusted figures are comparable with 1950 data. 1960. change in



Tenure and Age of Units: In 1950 the tenure of units built before 1940 within the Boston SMSA was

43 percent owner-occupied. From 1950 to 1960, there seemed to be a slight shift up to 45 percent toward owner-occupancy among already existing occupied units.

Units built between 1950 and 1960 within the Boston SMSA, however, are 80 percent owner-occupied or almost twice the rate of the pre-1940 units. This shift could have resulted either from increasing vacancies in renter-occupied units, a true shift in tenure of existing units, or from shifts in SMSA boundaries which led to the inclusion of more older owner-occupied units.

In the City of Boston, a varying pattern occurred regardless of age of unit. For all units, between 25 and 35 percent were owner-occupied. During the 1940's there was a slight trend toward an increasing proportion of renter-occupancy. This trend was reversed during the 1950's when rates of owner-occupancy again increased to about 35 percent.

Tenure and Age of Head: The age of the head of the household is an important indicator of the kind of housing a household is most likely to require.

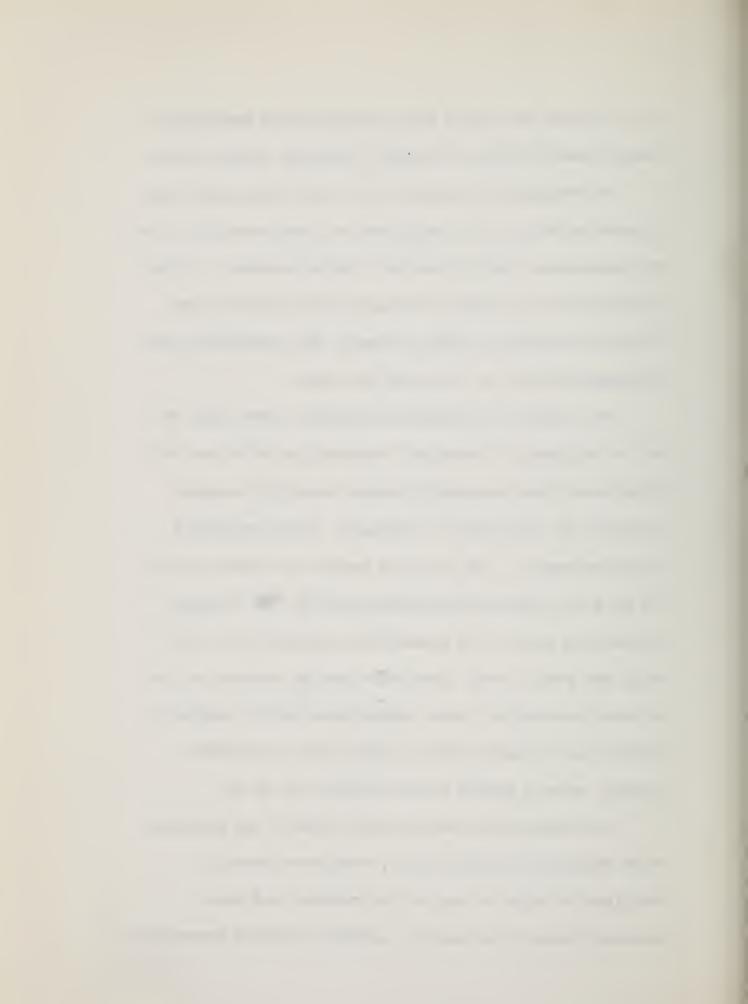


In the 20-29 age group young newly-formed households usually seek relatively small, low-cost rental units.

As households pass into the 30-44 age group they typically begin to be attracted to home ownership, due to increasing family size and rising incomes. During this period the burden of housing costs usually decreases because of rising incomes, but household size increases adding to the need for space.

The period of household expansion from ages 30-44 is followed by household contraction after age 45. From ages 45-64 household income generally remains constant or continues to increase, while household size decreases. The relative burden of housing costs in this age group is, therefore, usually the lightest of any age group. As households approach the end of this age period they often must decide whether or not to move to smaller, more appropriate living quarters. Renters are usually able to make this move fairly easily; owners appear more reluctant to do so.

As households move into the elderly age brackets, with head past the age of 65, they have usually declined in size to one or two persons and have minimum demands for space. Although elderly households



frequently have low incomes, they are about equally divided between renter and owner occupancy because of previous home purchases. Low-income elderly renters seek small low-rent units, and these households, because they are frequently dependent on fixed incomes, have the most difficult time satisfying their demands for housing.

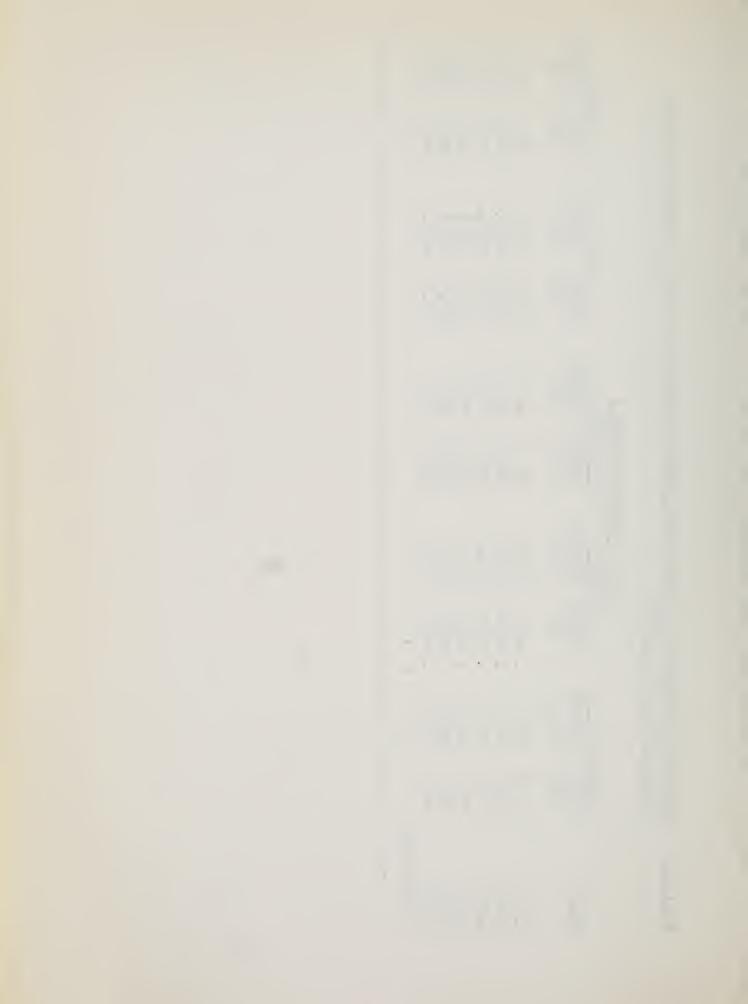
Within the HMA ownership by age group increased betwen 1950 and 1960 for all groups, as shown in Table 13. In Boston and the Boston SMSA, tenure patterns produced interesting variations by age of head. The 1960 tenure rates for elderly households were practically identical to 1950 rates. For both years in the Boston SMSA about half of the elderly households were home owners, and in the City approximately one-third were homeowners.

Owner-occupancy increased between 1950 and 1960 particularly among households under 65. In 1950 the elderly in the Boston SMSA had the highest ownership rates, by 1960 ownership rates for households under 65 had risen to slightly higher levels than for households over 65. Only in the City of Boston itself did the elderly continue to have the highest rate of owner occupancy.



Percent Distribution of Owner and Renter-Occupancy by Age of Household Head Table 13:

	in the	in the HMA, 1951 - 1969	- 1969							
			A	Age of Household Head	sehold H	ead				
	Under	. 35	35	5-44	45-64	64	9	65 +	Total	al
Year	Owner Rent %	Renter %	Owner %	Renter %	Owner %	Renter %	Owner %	Renter %	Owner %	Renter %
1921	31.6	68,4	46.2	53.8	52.0	48.0	53.1	46.9	46.6	53.4
1.953	33.1	6.99	49.4	50.6	54.4	45.6	53.3	46.7	48.6	51.4
1955	34.6	65.4	52.4	47.6	56.8	43.2	53.5	46.5	50.5	49.5
1957	36.1	63.9	55,3	44.7	59.3	40.7	53.7	46.3	52.3	47.7
1959	37.5	62.5	58.0	42.0	61.8	38.2	53.8	46.2	54.0	46.0
1969,	45.8	57.2	68.89	31.1	70.7	29.3	53.8	46.2	60.5	39.5
estimated										



Tenure patterns in the Boston SMSA show a general trend toward home ownership among all households, but a decreasing amount of home ownership among low-income, especially large, families. More and more frequently renter units are occupied by lower income families, and owner units by higher income groups. Further, elderly households are less frequently home owners than in the past. In 1960, for the first time, households under 65 in the Boston SMSA had higher ownership rates than those over 65.

These trends point out areas of future housing demand. With more low-income families renting, more family-sized rental units at low or moderate rents must be located. As elderly households increasingly rent, additional units suitable for their occupancy will be needed. Further, the steadily increasing number of households with children underlines the continuing need for family-sized rental and owner-occupied units.



## Housing Expenditures

Housing expenditures are closely related to household income, which in turn is related to standard of living and housing demand. First, the amount that a household spends on housing determines what income remains for other necessities of life. For example, a low-income household which spends 50 percent of its income on housing is unlikely to be able to afford adequate food, clothing, and medical care. Second, the amount of money that a family can spend on housing determines it competitive position in the housing market. Clearly, decent units command relatively high rents in the private market and are obtained by households which can afford their market costs.

Federal and state housing programs have established a general standard that a household should spend no more than 20 or 25 percent of its income on housing.

The standard has been incorporated into many federal housing programs which require that a family spend

no more than 20 or 25 percent of its income on unit rental or mortgage payments. Both the federal and state public housing programs have established a guideline of 20 percent of income for rent expenditures. In the newest Federally aided programs a 20 percent limit has been established for home ownership and a 25 percent limit for renters. The difference is considered to be attributable to the costs of utilities and maintenance which are usually included in rental charges, but not in mortgage payments. For the purposes of this study the 25 percent guideline has been accepted as the general standard for housing expenditures. This relationship between housing expenditures and total income is termed the rentincome ratio.

Rent-Income Ratios: The rent-income ratio, which expresses the proportion of a household's income expended for rent, is an important indicator of the severity of housing problems. Rent-income ratios are directly related to level of income, lower income households generally paying proportionately more for rents than higher income households. As household incomes increase, housing expenditures also increase,



but not at the same rate as incomes. Therefore, households with higher incomes are able to compete more effectively than lower income households, and frequently compete for the same units. The relationship between income and rent-income ratios in 1950 and 1960 is shown in Table 14.

Table 14: Rent-Income Ratios 1950 and 1960 in 1960 Constant Dollars, Boston SMSA

1950 Median Incomes	1950 Median Rents	Ratio
(1960 Constant \$)	(1960 Constant \$)	
\$634 (less than \$1,000)	\$540	.85
1902 (\$1000-1999	552	. 29
3170 (2000-2999)	576	.18
4438 (3000-3999)	624	.14
5706 (4000-4999)	<b>67</b> 8	.12
6974 (5000-5999)	732	.11
8242 (6000-6999)	774	.09
10778 (7000-9999)	8 <b>2</b> 8	.08
12680+( 10,000 +)	1308	.10
1960 Median Incomes	1960 Median Rents	Ratio
\$2000 or less	<b>\$ 76</b> 8	.77
2000 - 2999	852	.34
3000 - 3999	924	. 26
4000 - 4999	972	.22
5000 - 5999	1032	.19
6000 - 6999	1068	.16
7000 - 7999	1092	.15
8000 - 9999	1192	.13
10,000 - 14,999	1224	.10
15,000 +	1440+	.10



In the Boston SMSA in 1960 there were approximately 128,500 households paying 25 percent or more of their incomes for rent. Of these, 52,100 were paying 25-34 percent, and 76,400 were paying 35 percent or more. The largest group paying over 25 percent for rent were 55,000 households with incomes under \$2,000. Table 15 shows the number of households with high rent-income ratios in 1950 and 1960.

Table 15: Number of Households With High Rent-Income
Ratios, Boston SMA 1950 and SMSA 1960

	Number of Households Paying:					
Income, 1950	20-29%	30% or more	Total 20% or more			
Under \$2,000	10,780	48,770	59,550			
\$2000-2999	38,530	13,845	52,375			
3000-3999	26,985	2,940	29,925			
4000-4999	5,560	595	6,155			
5000- or more	2,615	335	2,950			
Total:	84,470	66,485	150,955			
Income, 1960	25-34%	35% or more	Total 25% or more			
Under \$2,000	5,380	49,810	55,190			
\$2000-2999	10,235	16,782	27,017			
3000-3999	16,216	6,895	23,111			
4000-4999	12,011	1,807	13,818			
5000 or more	8,251	1,156	9,407			
Total:	52,093	76,450	128,543			



Family Budgets: Another method of determining the relationship between housing and other expenditures is to consider average budgets for different household types. The Bureau of Labor Statistics has developed average budgets for a city worker's family and for a retired couple in 37 SMSA's of the United States. These budgets represent a moderate standard of living in 1966, based on the collective judgment of families as to what is necessary and desirable to meet their conventional needs.

The average budget method of determining what proportion of its income a household should spend on housing has some advantages over the rent-income ratio method. In the first place, it takes into consideration the total, and therefore more realistic, expenditures of a family. Secondly, it is specific to different geographical locations, and thirdly, it is more flexible as to the type of household whose budget is being examined. While it is a more detailed method, the household budget approach seems to be a more accurate way to represent the costs of modern living.



An average city worker's family is considered to be a family of four; husband 38, wife unemployed, boy 13, and girl 8. In metropolitan Boston in 1966 the annual gross income necessary to attain a modest living was determined to be \$10,141. Average housing expenditures for this family equalled \$3,018 or 29 percent for a home owner, and \$1,875 or 21 percent for a renter. These housing costs are broken down for both renters and owners in Table 16, which also shows similar expenditures in Philadelphia and an Hartford.

When the Boston SMSA is compared to other areas it is clear that it is a more expensive area in which to live. The national average income necessary to maintain a modest standard of living is \$9,191, compared to \$10,141 in Boston. Boston is the most expensive city in which to own a home, 128 percent of the national average, and the sixth most expensive area for rental housing, 105 percent of the national average. It is also of interest to note that in 1965 the median family income for the Boston SMSA was \$7,280.

Table 16: Monthly Housing Costs for City Worker's Family, Autumn 1966 1.

U.	erage for 37 S. Metro- litan Areas	Boston, Mass.	Hartford, Conn.	Philadelphia, Pa.
Shelter	18	\$211	\$190	\$154
Furnishing		22	22	22
Operations		19	<u>16</u>	<u>17</u>
Total Cost		\$252	\$228	\$194
Renter				
Shelter	18	\$115	\$124	\$ 89
Furnishing		22	22	22
Operations		19	<u>16</u>	<u>17</u>
Total Cost		\$156	\$162	\$128

<sup>1.</sup> Bureau of Labor Statistics, City Workers Family Budget, Bulletin #1570-1, Autumn, 1966.

The Bureau of Labor Statistics also developed a budget for a retired couple with the head of household over 65. It estimated that for the Boston metropolitan area in 1966 an annual income of \$4,298 was necessary to maintain a modest standard of living. The comparable national average is \$4,006. Retired couples owning their homes outright contribute \$1,586 or 37 percent of their income to housing. Renters contribute \$1,612 or about 37 percent of their budget. These expenditures are broken down in Table 17.



Table 17: Monthly Housing Costs for Retired Couple,
Autumn 1966 1.

Average 37 Metropo Owner Areas	olitan	Boston, Mass.	Hartford, Conn.	Philadelphia,	
Shelter Furnishings Operations Total Cost	\$ 69	\$ 89	\$ 79	\$ 75	
	15	14	15	15	
	27	29	27	25	
	\$111	\$132	\$121	\$115	
Renter					
Shelter	\$ 84	\$ 91	\$ 95	\$ 78	
Furnishings	15	14	15	15	
Operations	27	29	<u>27</u>	<u>25</u>	
Total Cost	\$126	\$134	\$137	\$118	

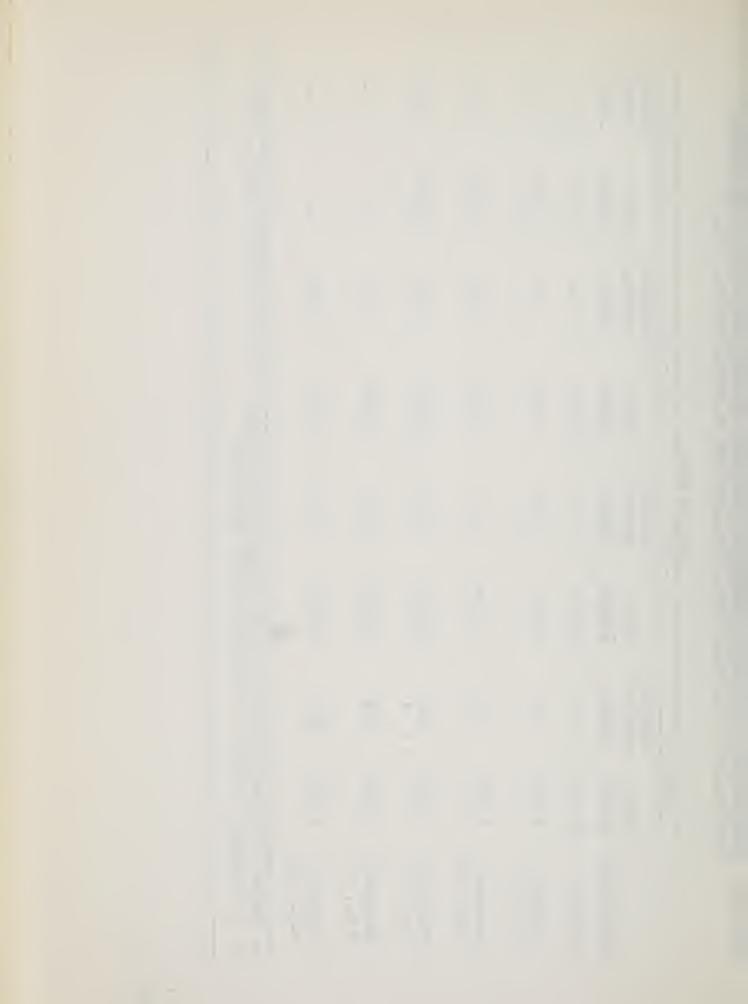
<sup>1.</sup> Bureau of Labor Statistics, Retired Couples Budget, Bulletin #1570-4.

Because most families do not match the composition of the standard city worker's family or the retired couple, a scale is presented which estimates income and monthly housing costs, at 25 percent of income by family size and age of head. Table 18 shows gross income, based on the standard city worker's family budget, required to provide the same moderate standard of living for other urban families. Housing expenditures are based on a 1:4 rent-income ratio.



Gross Income Necessary to Maintain a Moderate Standard of Living, and Monthly Housing Costs by Family Type, Size, and Age of Head, Boston, 1966, 1. Table 18:

	Monthly	Housing	\$ 59	108	171	200	î î	ì	n, 1966.
	TO CO	Gross	\$2,832	5,184	8,208	009*6	1	g e	0-1, Autum
6.4	Monthly	Housing	\$ 68	125	186	222	253	295	Bulletin #1570-1, Autumn,
r r	1	Gross	\$3,264	000*9	8,928	10,656	12,144	14,160	get
Age of Head	Monthly	Housing	\$ 76	127	173	211	245	279	Bureau of Labor Statistics, <u>City Workers Family Budget</u> , H= husband, W= Wife, C- children ages 6 through 15.
	200	Gross	\$3,648	960.9	8,304	10,128	11,760	13,392	City Worke ldren ages
25	Monthly	Housing	\$ 74	103	131	163	203	232	Bureau of Labor Statistics, Ci H= husband, W= Wife, C- childr
Tradow 25	onder	Gross	\$3,552	4,944	6,288	7,824	9,744	1,136	of Labor S nd, W= Wi
		Family Size	1 Person	2 Persons: H. W.	3 Persons: H.W. 1C.	4 Persons: H.W., 2C.	5 Persons: H.W., 3C.	6 Persons: H.W., 4C.	1. Bureau o 2. H= husba



It is interesting to note that income needed to maintain a moderate standard of living reaches a maximum in the 54 to 64 age group. Income needs are lowest in the under 35 age group, rise in the 35-54 age group, reach a maximum in the 55-64 group, and decline slightly in the 65 and over group.

The rent-income ratio analysis provides a quick way of discovering how many households are in need of less costly housing, or of supplements to their housing budgets if such housing is unavailable.

The contrast between the annual incomes necessary to maintain modest living standards, and the actual median incomes in the Boston area, suggests that the number of households in need of assistance is greater than the rent-income ratios indicate.



## CHARACTERISTICS OF HOUSING SUPPLY

There are several important components of housing supply of which the most crucial is the total number of units. The useful potential of the supply is tempered by the condition of the units; that is, how many of them are structurally sound, deficient, or substandard. The growth of the housing stock is determined by the annual rates of new construction, conversions, and removals from the housing stock.

These various rates must be seen in geographical as well as numerical patterns in order to establish total housing patterns throughout the Housing Market Area. The following sections discuss these general characteristics of housing supply in the HMA.

## Housing Condition and Costs

There were a total of 876,432 housing units in the HMA in 1960 of which 831,800 or 95 percent were occupied. The condition of these units and their market values are important in understanding the characteristics of the housing supply. It is important to recognize the historic patterns of change in the housing stock through new construction, demolitions,



or conversions in order to project the ability of the future stock to meet the future demand.

Trends in Housing Condition, 1950 to 1960: Trends in housing conditions are available through U.S.

Census data for the Boston and Brockton SMSA's from 1950 to 1960. Because these SMSA's include most of the communities in the HMA, the trends drawn from the data are indicative of housing conditions in the study area as a whole.

Census definitions of housing conditions changed between 1950 and 1960. It is useful, therefore, to categorize conditions in both these years using three comparable categories suggested by the Census Bureau. These categories are as follows: not dilapidated with all plumbing, not dilapidated but lacking some or all plumbing, and dilapidated.

In both the Boston SMSA and the Brockton SMSA housing conditions improved absolutely and relatively from 1950 to 1960 in all categories as shown in Table 19. The number of dilapidated units in the Boston SMSA decreased from 3.8 percent of the total to 2.3 percent of the total, or by 6,370 units. Units not dilapidated



but lacking some or all plumbing decreased from 8.4 percent to 5.8 percent of the total, or by 7,135 units. Of the total units, the condition of owner-occupied units and renter-occupied units each improved. However, in 1960, 98 percent of the owner-occupied units were not dilapidated with all plumbing, and only 87.4 percent of the renter occupied units were so categorized.

In the Brockton SMSA there were 37,876 housing units reported in 1950, of which 31,159 units or 82.3 percent of the total were not dilapidated and had all plumbing facilities. Of the remainder, 5,576 or almost 15 percent were not dilapidated but lacking some or all plumbing facilities, and 1,141 units, representing 3 percent, were dilapidated. By 1960 housing conditions had improved substantially. Of a total 45,983 dwelling units, 41,637 or 90.5 percent were not dilapidated with all plumbing facilities. Those that were not dilapidated but lacked some or all facilities numbered 3,257 units or 7 percent, and dilapidated units numbered 1,089 units or 2.4 percent.



Table 19: Condition of Total Housing Units, Boston and Brockton SMSA's, 1950-1960

	Brockton SMSA	90.5	7.1	2.4	100.0	
	Brockt	41,637	3,257	1,089	45,983	
1960	SMSA %	91.9%	rv @	2.3	100.0	
	Boston SMSA Number	747,744	47,612	18,729	814,085	
	Brockton SMSA	82.3	14.7	3.1	100.0	
1950	Brockt	31,159	5,576	1,141	37,876	
	Boston SMSA mber %	81.8%	8.	3.8	100.0	
	Bostor	573, 314	54,747	25,100	653,161	
	Condition	Not dilapidated with all plumbing	Not dilapidated lacking some or all plumbing	Dilapidated	Total Units:	

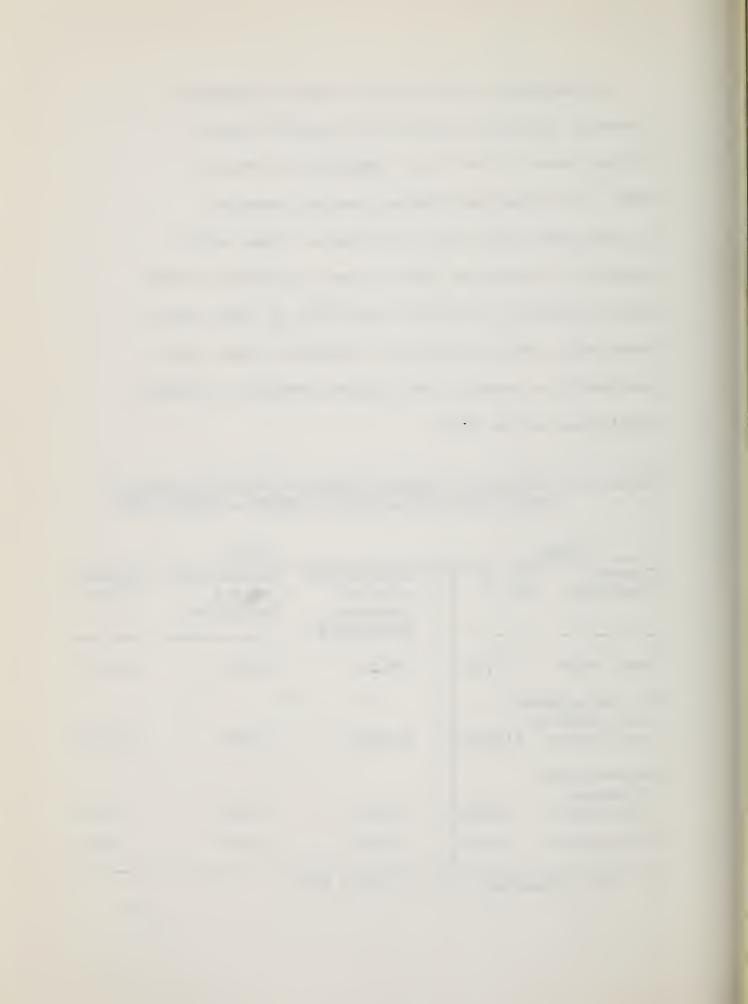


In December, 1959, the U.S. Census conducted a special census of housing for selected metropolitan areas in the U.S., including the Boston SMSA, 1. to determine changes that had occurred in individual units over the decade. Those units sampled in the Boston SMSA are ones for which records were available in both 1950 and 1959, or "same units". These data, shown in Table 20, involving same units are useful in showing the relative changes in housing conditions in the SMSA.

Table 20: Changes in Housing Condition 1950-1959 for all Units with 1950 and 1959 Records, Boston SMSA

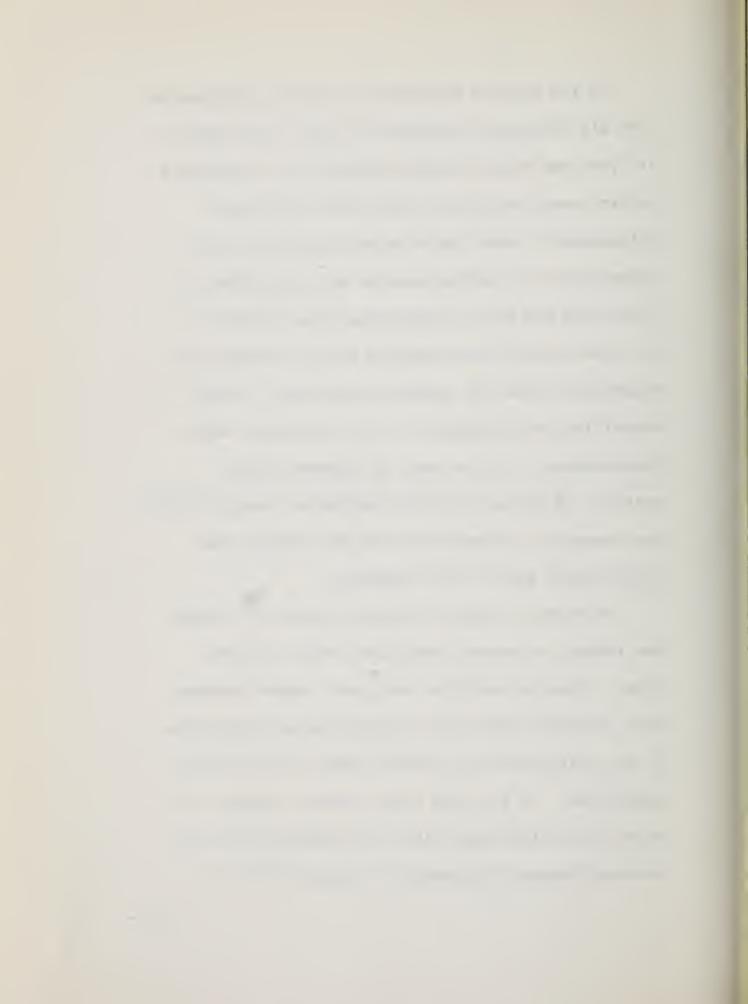
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<sup>1. 1959</sup> definition of the Boston SMSA



Of the 510,724 units which were not dilapidated with all plumbing facilities in 1950, the condition of 8,943 had deteriorated to become not dilapidated lacking some facilities, and 14,008 had become dilapidated. Among those units classified as not dilapidated but lacking some or all facilities in 1950, 4,168 had become dilapidated, but 20,789 or 60.7 percent had been upgraded to the category not dilapidated with all plumbing facilities. Units classified as dilapidated in 1950 underwent major improvements. By 1960 only 21 percent of the original 18,344 were still dilapidated, nearly 12,000 had become not dilapidated with all plumbing and 2,518 lacked some or all plumbing.

As shown in Table 20 these statistics indicate two trends in housing conditions among the same units. Housing condition underwent marked improvement in units which were categorized as dilapidated or not dilapidated but lacking some or all plumbing facilities. At the same time, however, enough units in the not dilapidated with all plumbing facilities category became dilapidated so that by 1959 the



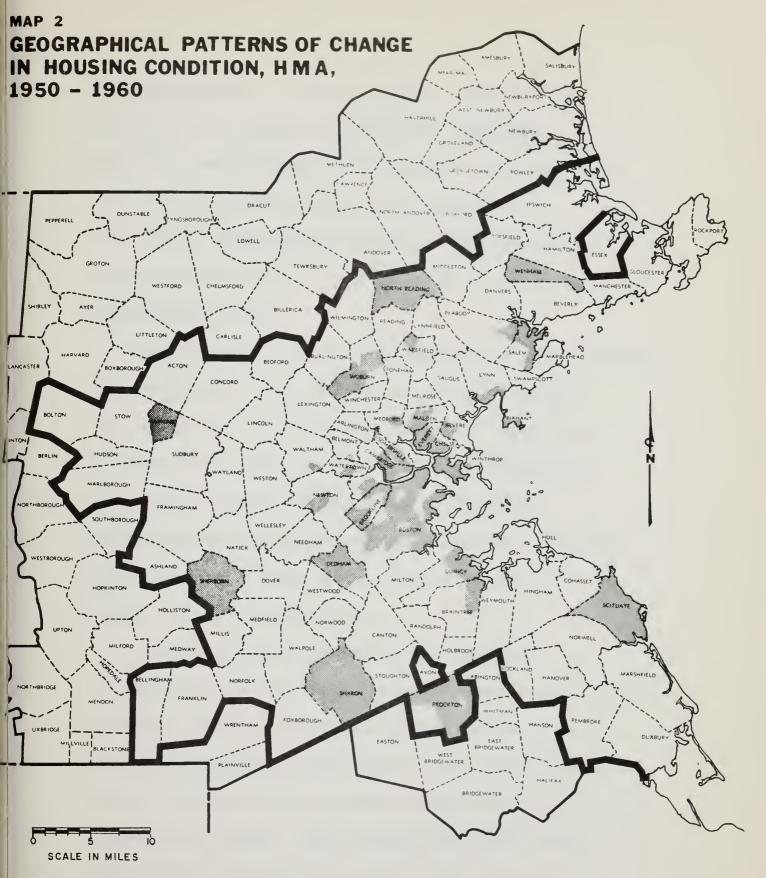
percentage of dilapidated units had increased from 3.3 percent to 3.9 percent.

The geographical patterns of change in housing conditions throughout the metropolitan area are indicated by Map 2, which shows the census tracts in which the condition of housing declined between 1950 to 1960 relative to the condition of housing in the metropolitan area as a whole. These areas are not necessarily the census tracts where the poorest housing was to be found in 1950 or 1960. They are, however, the areas in which the normal housing market does not appear to be adequate in maintaining the quality of the housing units. Many of these tracts are, therefore, areas in which special housing programs will be needed in the future.

Housing Condition, 1960: The Department of
Housing and Urban Development (HUD) uses still another
set of definitions of housing conditions. These
categories, standard, deficient, and substandard,
are based on 1960 census definitions of housing
conditions and have become common usage in discussions
concerned with housing.

<sup>1.</sup> Frank Sweetser, Social Ecology in Metropolitan
Boston: Changes 1950 to 1960.





Census Tracts where housing condition declined relative to housing in the metropolitan area as a whole

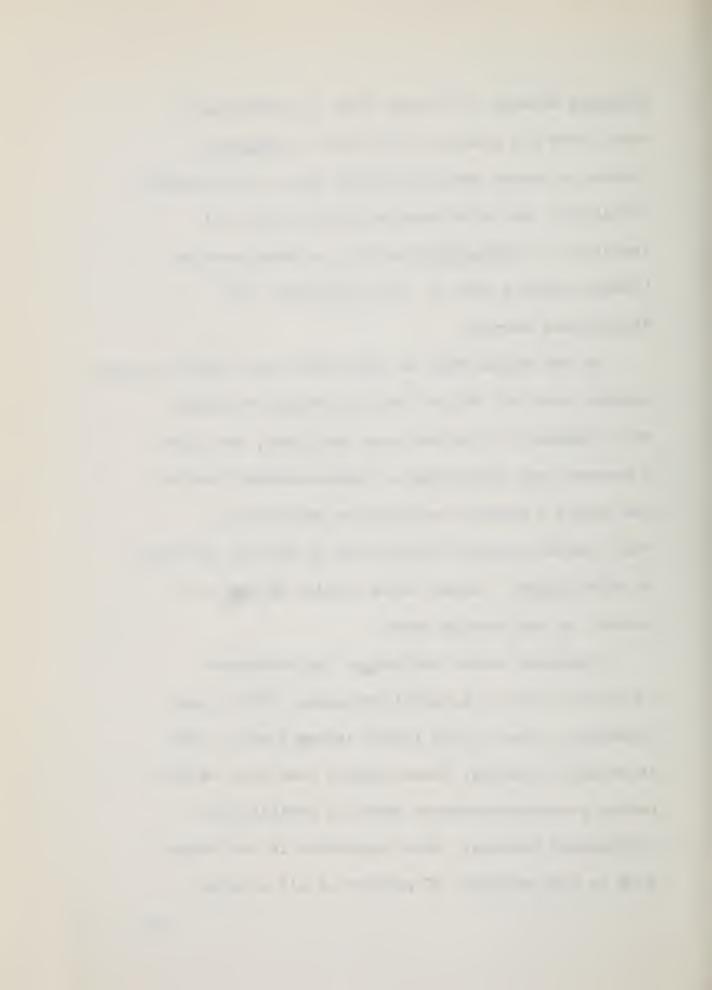
The preparation of this map was financially aided through a Federal grant from the Department of Housing and Urban Development under the Urban Planning Assistance Program authorized by Section 701 of the Housing Act of 1954, as amended.



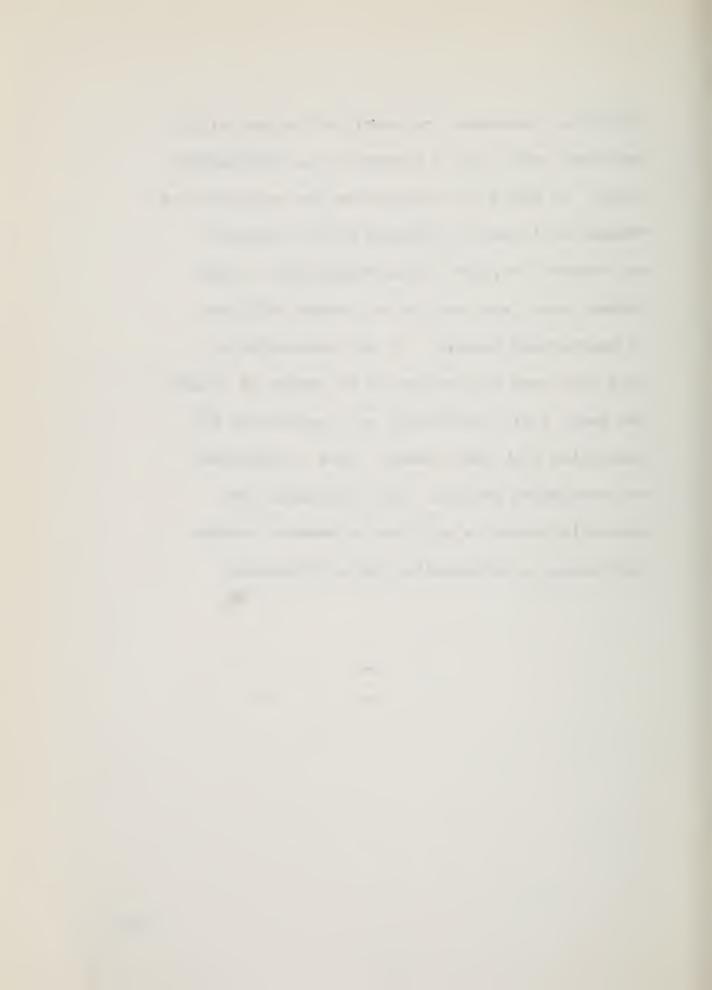
Standard housing is housing that is structurally sound with all plumbing facilities. Deficient housing is sound housing lacking some or all plumbing facilities, and deteriorating housing with all facilities. Substandard housing is deteriorating housing lacking some or all facilities, and dilapidated housing.

In the Boston SMSA in 1960 there was a total occupied housing stock of 770,468 units of which 85 percent were standard, 11 percent were deficient, and about 4 percent were substandard. Owner-occupied housing was nearly 7 percent deficient or substandard, while renter-occupied housing was 23 percent deficient or substandard. Vacant units totaled 43,567 or 5 percent of the housing stock.

Household income inflrences the condition of housing which a household occupies. While most households, even at the lowest income levels, live in standard housing, those earning less than \$4,000 occupy a disproportionate share of deficient or substandard housing. Such households in the Boston SMSA in 1960 occupied 27 percent of all occupied



units, but accounted for nearly 47 percent of all deficient units and 63 percent of all substandard units. As Table 21 demonstrates the percentage of households living in standard units increases as incomes rise, and renter households, at any income level, are more apt to occupy deficient or substandard housing. It is interesting to note that even when income is in excess of \$15,000 per year, 1,112 households, or 9 percent of all households with such incomes, live in deficient or substandard housing. This indicates that household income is only one of several factors influencing a household's choice of housing.



Housing Condition of Occupied Units by Tenure and Income, Boston SMSA, 1960 1. Table 21:

Income

	1 1 2	יל ג	400	÷ 0	Subatandard	ביי היים היים	Total
Owner-Occupied	Number	%	Number	%	Number	281	
Under \$2,000	25,121	83.6	3,698	12.3	1,218	4.1	30,037
\$2000-2999	13,977	87.6	1,540	9.7	431	2.7	15,948
3000-3999	18,413	88.7	1,893	9.1	462	2.2	20,768
4000-4999	27,403	6.06	2,560	8.4	490	1,6	30,453
5000-5999	42,138	93.9	3,136	8.9	569	1.2	45,843
6669-0009	42,798	93.7	2,457	5.4	419	6.	45,674
7000-7999	39,995	94.7	1,990	4.7	263	9	42,248
8000-9999	60,555	95.5	2,450	3.9	394	9•	63,399
10,000-14,999	66,183	96.4	2,272	e, e	231	۳ •	989,89
15,000-or more	39,047	98.4	580	1,5	62	•2	39,689
Total:	375,630	93.3	22,576	5.6	4,539	1.1	402,745

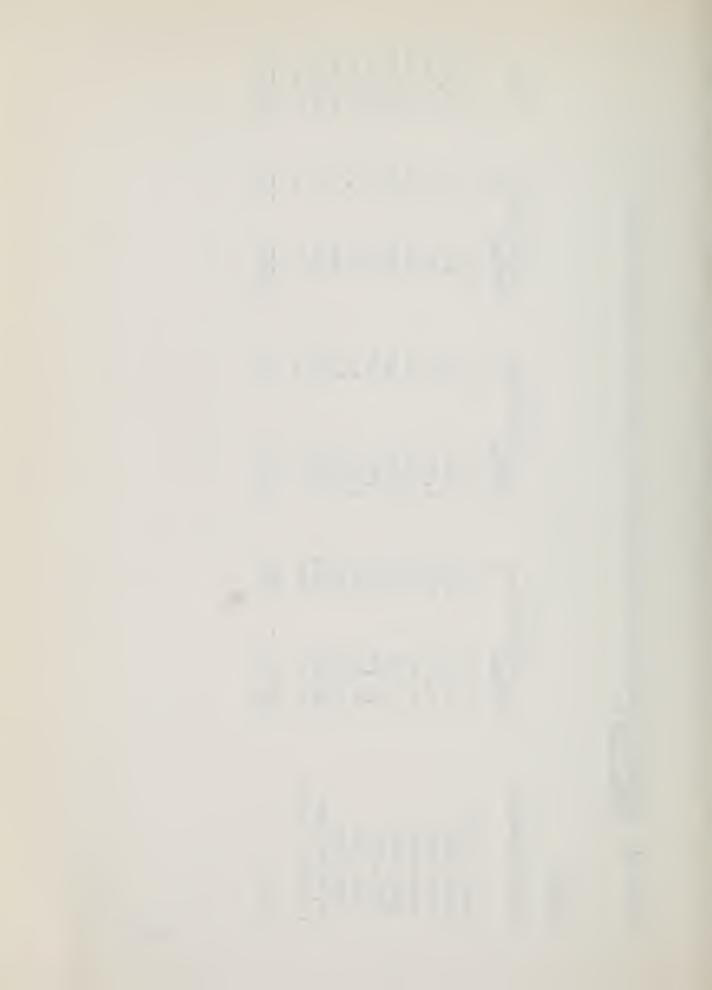
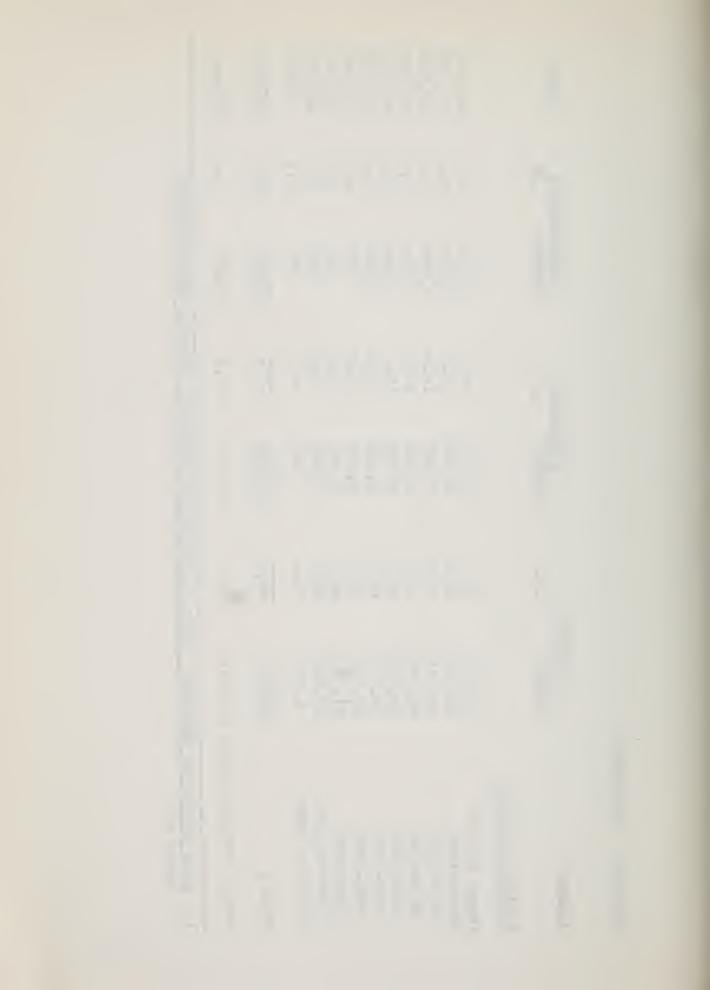


Table 21: Continued

Income	Standard	// // // // // // // // // // // // //	<u>Deficient</u> <u>Number</u>	ent %	Substandard	ndard %	Total
Renter-Occupied							
Under \$2,000	41,222	61.5	16,815	25.1	8,943	13.4	086,980
\$2000-2999	24,150	67.8	8,048	22.6	3,428	9.6	35,626
3000-3999	30,916	73.9	7,887	18.9	3,024	7.2	41,827
4000-4999	36,798	77.9	8,026	17.0	2,384	5.0	47,208
5000-5999	39,484	6.08	7,502	15.4	1,833	3.8	48,819
6669-0009	29,903	83.2	4,823	13.4	1,236	3.4	35,962
7000-7999	23,558	85.3	3,275	11.9	791	2.9	27,624
8000-9999	27,352	86.1	3,557	11.2	862	2.7	31,771
10,000-14,999	21,655	88.6	2,281	9.3	517	2.1	24,453
15,000 or more	6,883	92.4	482	6.5	88	1.2	7,453
Total:	281,921	76.7	62,696	17.0	23,106	6.3	367,723
Total Occupied Units 657,551	s 657,551	85.3	85,272	11.1	27,645	3.6	770,468
1. II.S. Cenama of Housing.		60 Motron	1960 Netronolitan Honeing	no Boeto	Boston Massachusotts	100++0	

U.S. Census of Housing: 1960, Metropolitan Housing, Boston, Massachusetts, Table A-4.



Housing Costs, 1950 to 1967: Housing costs, or the amount that a household must pay to own or rent a housing unit, have increased from 1950 to 1967. These price increases may be viewed in terms of current dollars and in terms of consumer price indexes. Table 22 shows price movements in current dollars from 1950 to 1960 in individual units for which the U.S. Census had value data. As is shown in this table, the median value of single-family owner-occupied units increased by 49 percent, from \$10,200 in 1950 to \$15,200 in 1960.

During the same period monthly rents increased by 58 percent, from \$52 in 1950 to \$82 in 1960.

Table 22: Price Movements in Same Units, April,
1950 to December, 1959, Boston SMSA

Value	1950		<b>1</b> 959	
	Number	%	Number	_%_
Owner-occupied,				
Single family	154,903	100.0	195,178	100.0
Less than \$5,000	13,748	8.9	2,654	1.4
\$5,000-7400	23,295	15.0	7,650	3.9
\$7500-9900	36,646	23.7	12,802	6.6
10,000-12,400	38,495	24.9	34,117	17.5
12,500-14,900	8,467	5.5	37,839	19.4
15,000 or more	34,252	22.1	100,116	51.3
Median Value	10,200		15,200	

Average Annual Increase 1950 - 1960

4.9%

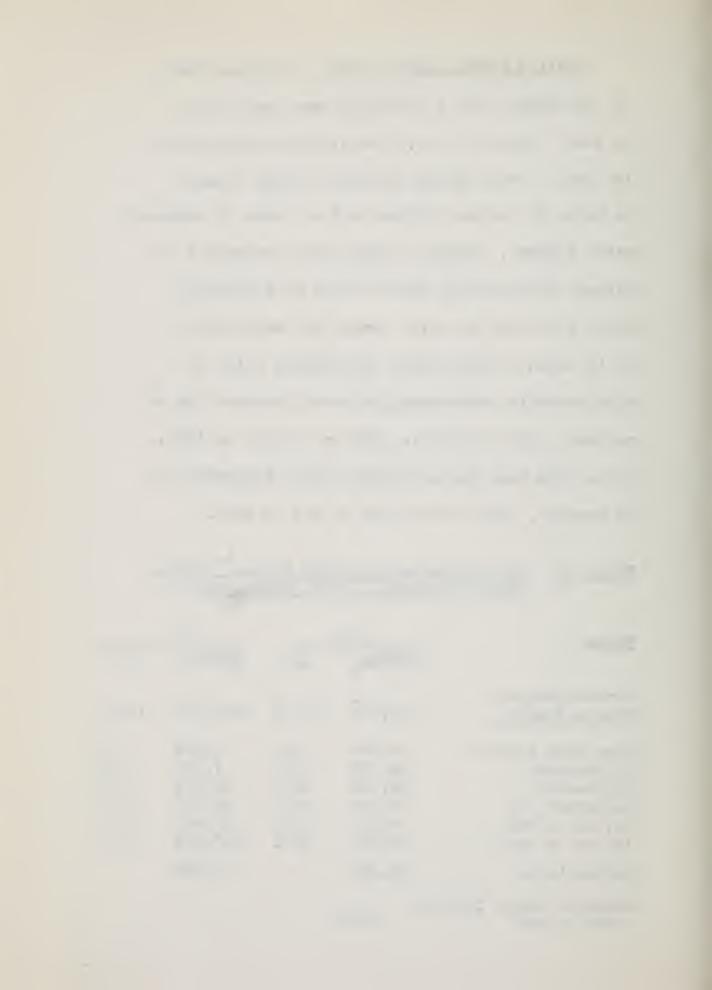


Table 22: Continued

	195	50	19	959
	Number	%	Number	%
Rental Units,				
Gross rent	263,811	100.0	281,329	100.0
Less than \$20	1,351	•5		
\$20 - 39	45,798	17.4	8,874	3.2
40 - 59	136,836	51.9	43,489	15.5
60 - 79	59,961	22.7	81,829	29.1
80 - 99	15,026	5.7	84,762	30.1
100 or more	4,839	1.8	62,375	22.2
no cash rent	19,462		6,885	
Median Gross Rent	\$52		\$82	
Median Gross Rent	\$52		\$82	

Average Annual Increase 1950 - 1960

are shown in Table 23.

5.8%

The U.S. Department of Labor, Bureau of Labor

Statistics, publishes Consumer Price Indexes for urban wage earners which show changes in prices due only to inflation. These indexes for the Boston area

Table 23: Consumer Price Index, Boston, 1957-1959=100

<u>Year</u>	All Items	Home Ownership	Rent
April 1950 April 1960 April 1967	81.7 103.6 118.8	78.7 109.0 127.2	74.9 107.4 125.2
1950 - 1960 avera	ge <b>2.7</b> %	3.8%	4.3%
1960 - 1967 avera annual increase	ge 2.1%	2.4%	2.3%

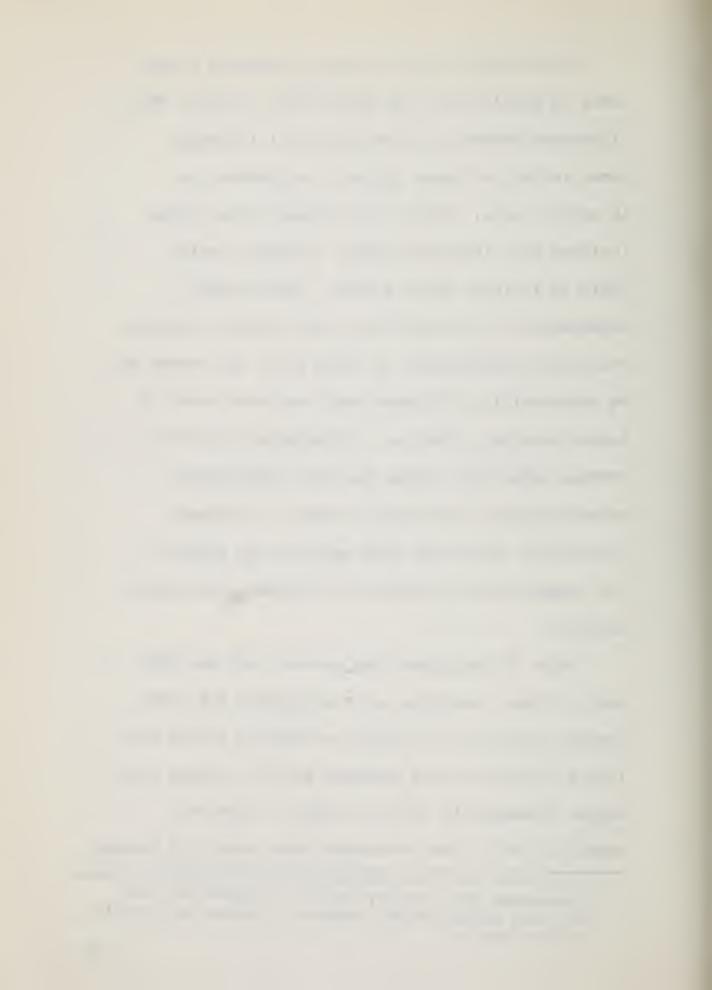
Values assigned units not on sale during this period are estimates.



Both Tables 22 and 23 show an increase in the costs of housing over the period 1950 to 1960. The difference between the average annual increases shown in both of these tables is accounted for in several ways. First, the consumer price index includes only increases due to inflation, while Table 22 includes other factors, such as real improvements in the quality of the housing. Second, the housing represented in Table 23 by the Census may be substantially different from the total stock of rental housing in Boston. Groups other than the average urban wage earner may have experienced somewhat greater increases to reach an average increase in value over this period of 49 percent for single-family housing and 58 percent for renter housing.

Table 23 indicates that between 1960 and 1967 costs of home ownership and renting have not risen through inflation as rapidly as they did during the 1950's.¹ Inflation has produced for the average wage earner increases in rents of about 2.3 percent annually, and in home ownership costs about 2.4 percent

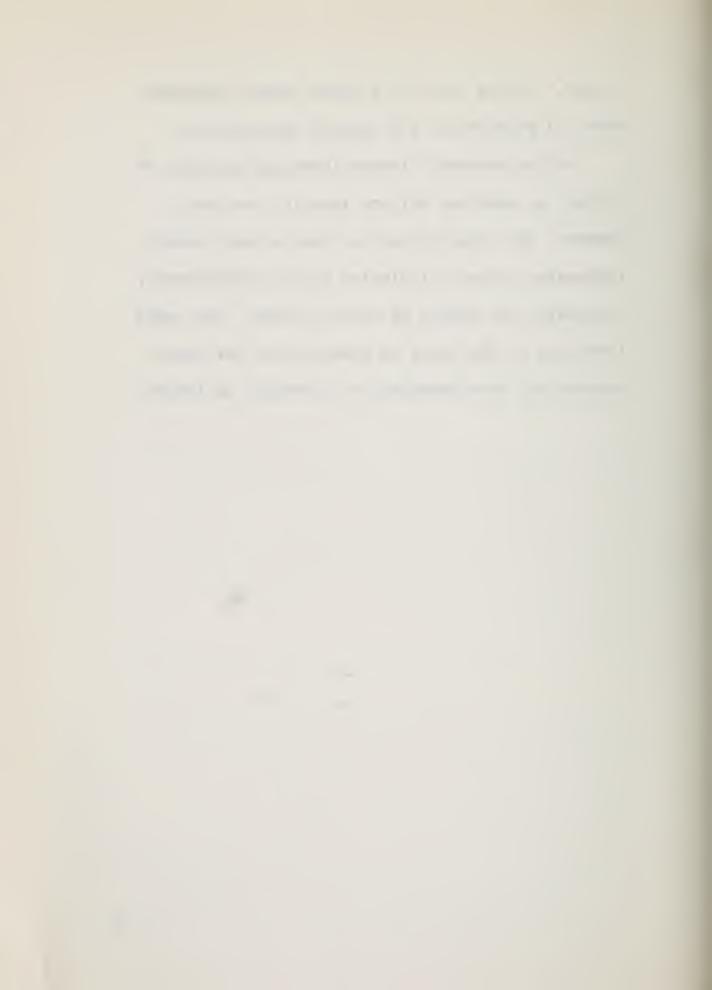
<sup>1.</sup> Rent data from 1968 indicates that the housing index increased very rapidly in 1968, suggesting that by 1970 inflation may produce increases comparable to the 1950's.



a year. During the 1950's these annual increases were 4.3 percent and 3.8 percent respectively.

Median household income increased by about 69 percent in constant dollars from 1950 to 1960.

However, for those living on fixed or only slowly increasing incomes, inflation may be significantly increasing the burden of housing costs. The rapid increases in the costs of housing are, for these households, outdistancing the increases in income.



## New Construction

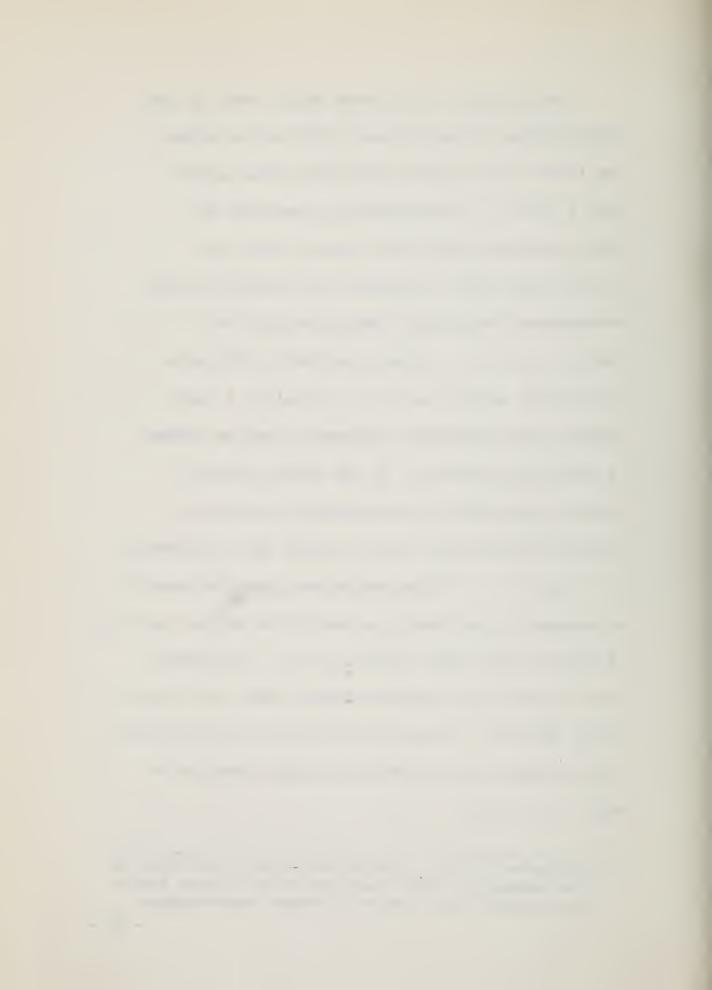
Most additional units to the housing stock are supplied by new construction rather than by conversion of existing units. New construction is also the usual means of replacing units which have become obsolete or substandard. For these reasons the characteristics of new construction are important as they relate to and influence the total stock of housing.

General Characteristics: The annual rate of new construction in the HMA has varied widely during the period 1950 - 1966, but has been generally increasing over time. In the early 1950's the rate of new construction was high, largely as a result of rising incomes, a back-log of pent-up demand, the growing obsolescence of existing housing, and the availability of new mortgage tools such as FHA mortgage insurance programs. New construction dropped off slightly in the mid-1950's, reaching a low during the recession of 1957-1958. In the early 1960's rates rose again and have continued to rise through 1967.



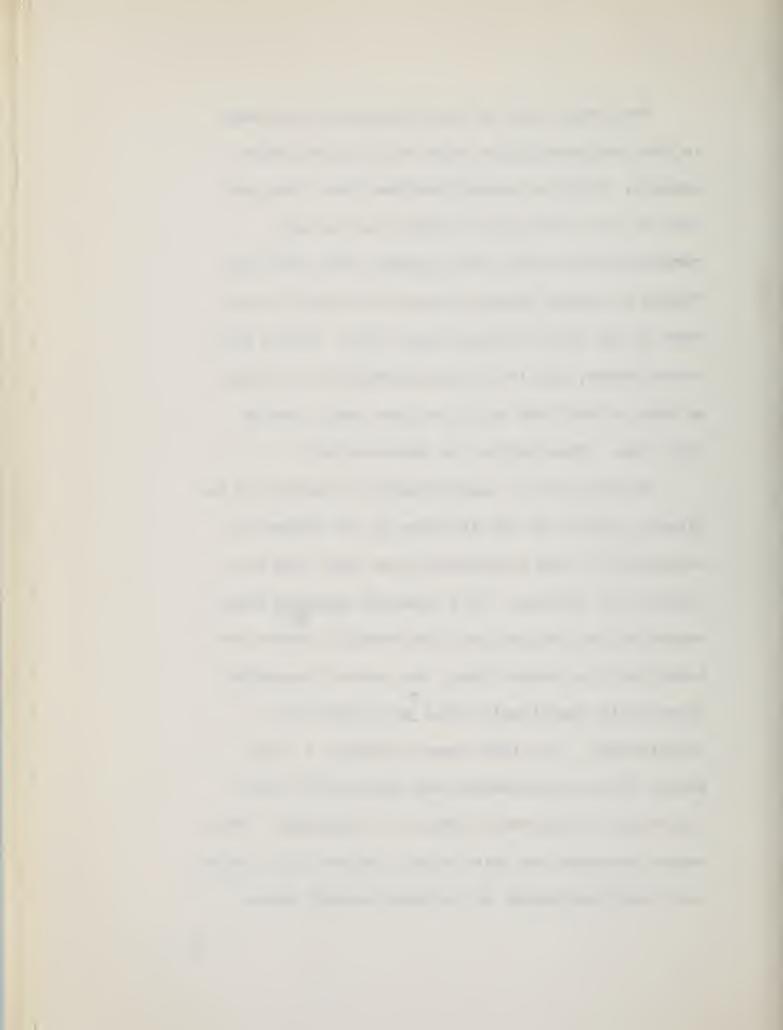
Specifically, the average annual rate of new construction in the HMA was 11,255 units during the 1950's, and 14,603 units during the period 1960 - 1966.1. The geographical patterns of this new construction have varied over time. In 1950 units built outside of the city of Boston outnumbered those built within the city by a factor of 10: 1. By the mid-1950's this ratio was running as high as 20: 1, revealing a heavy emphasis upon suburban construction and an absence of activity in Boston. By the 1960's, however, Boston experienced an accelerated rate of new housing construction, and the ratio fell to between 3: 1 and 2: 1. These variations depend primarily on changes in new housing construction within the City of Boston rather than outside of it. The annual rate for the HMA, excluding Boston, went from 10,212 units per year from 1950 to 1959, to 11,584 units per year from 1960 to 1966, an annual increase of only 1,372 units.

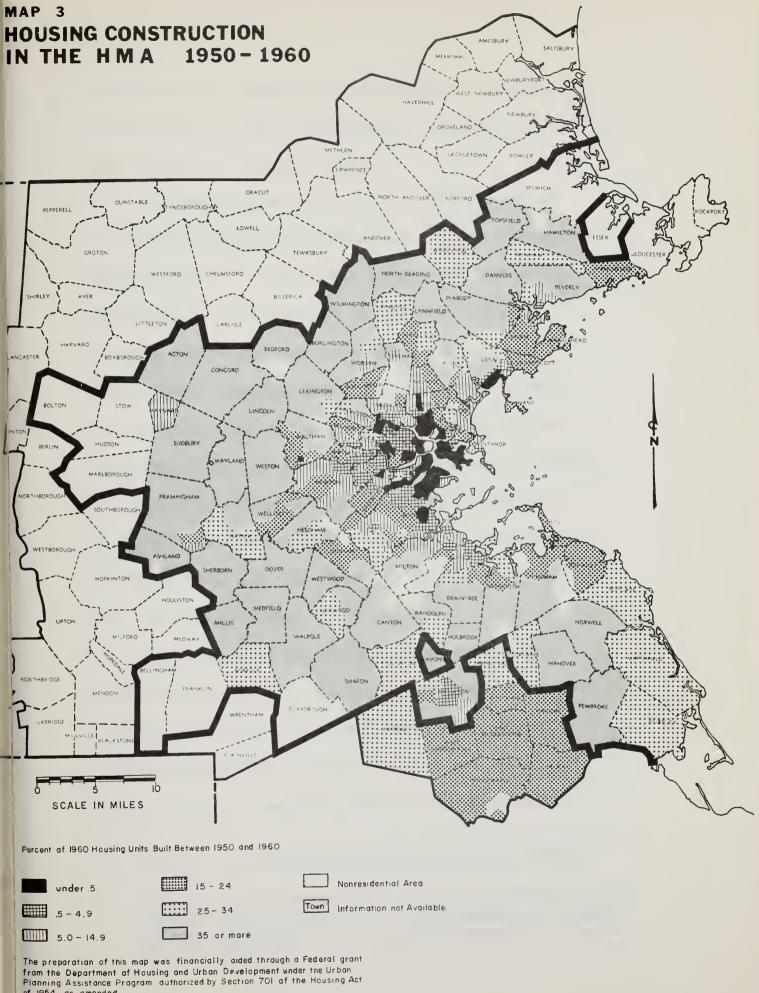
<sup>1.</sup> Estimates of new construction starts are based on the assumption that 94.1 percent of issued building permits will result in actual construction.



The annual rate of new construction is lower in the core communities than it is in the outer suburbs. With few exceptions less than five percent of the 1960 units in Boston or the core communities had been built between 1950 and 1960. Within the inner suburbs between five and 24 percent of the 1960 units had been built in the previous decade, and in the outer suburbs 25 percent or more of the 1960 units had been built during this time. This pattern is shown on Map 3.

The rate of new construction of housing can be closely related to the increase in the number of households. This relationship may vary from one location to another. In a suburban location where vacancies are low and new single-family houses are being built on vacant land, the rate of household growth will practically equal the rate of new construction. In older areas, however, a large amount of new construction may occur with little net change in the total number of households. This occurs wherever new units simply replace units which have been demolished, as in urban renewal areas.





of 1954, as amended.



In addition to demolitions and household growth, new construction is also affected by conversions, mergers, and changes in vacancy rates.

In general the ratio of new construction to household increase was about 1.3: 1 for the period 1950 to 1956. This ratio means that for every increase of one household in the HMA 1.3 new housing units are currently being built. In other words, approximately 23 percent of current new construction is based upon demand to replace demolished and obsolete units as well as to provide new units for household increase. By 1960 the ratio of new construction to household increase had risen to over 1.8: 1 giving an average of 1.44: 1 for the whole decade. 2.

This ratio of new construction to household growth continued to rise during the 1960's, showing that an even greater emphasis was being placed within the metropolitan area on new residential construction to replace older or obsolete units.

<sup>1.</sup> Grigsby, Wm., Housing Markets and Public Policy.

<sup>2.</sup> Bureau of the Census, U.S. Census of Housing, 1960, Boston Massachusetts Area, Components of Inventory Change, Part 1A: 1950 - 1959 Components, Department of Commerce. - 69 -



In the City of Boston particularly this reflected the expansion of the urban renewal program during the early 1960's, but even in communities without urban renewal programs it was likely that the rate of demolitions occurring through private market action was also increasing. It is estimated for the HMA as a whole that the ratio of new construction to household increase will be 1.99: 1 for the 1960 to 1969 decade.

The rate of single-family construction decreased from 85 percent in the 1950's to 50 percent during the period 1960 to 1967. Generally speaking since 1955 the average rate of new single-family construction has been decreasing each year. Only 15 percent of all units constructed in the 1950's were multifamily. This percentage increased significantly in the 1960's, much of the increase reflecting new multifamily construction in Boston, although this type of housing was gaining in many inner suburban areas as well. Units in two-family structures remained at about three percent of all units being built throughout

<sup>1.</sup> This figure was calculated by dividing the total estimated new construction, 1960 - 1970, by the projected increase in households for this period.



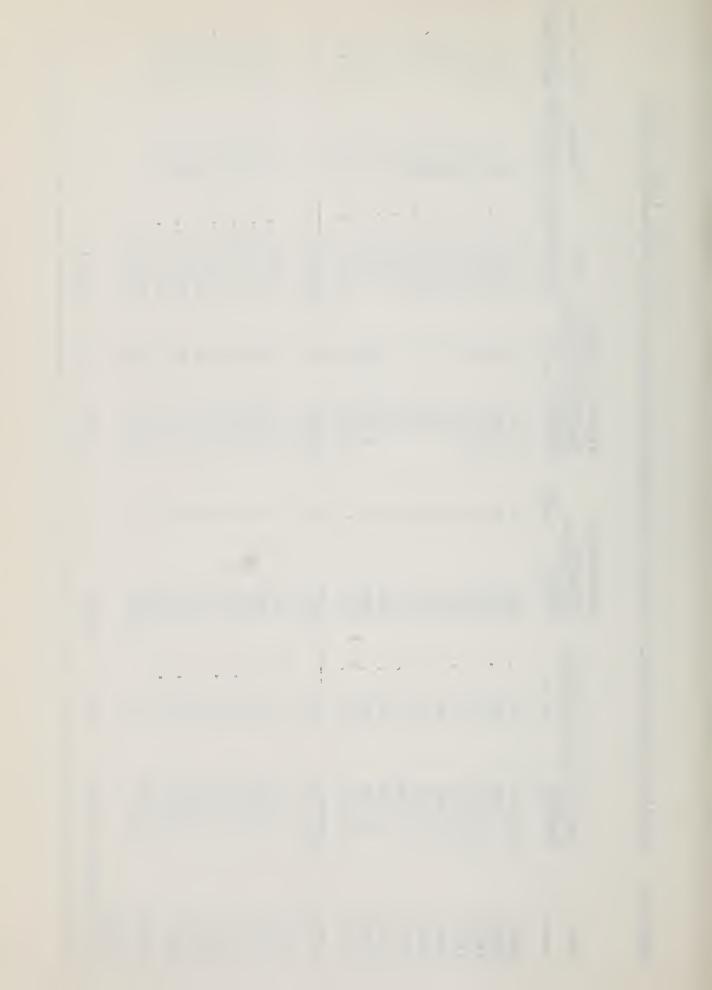
the 1950 to 1967 period. These changes in construction types are shown in Table 24.

Trends in tenure, that is owner or renter-occupancy, are closely related to trends in new residential construction types. Basing estimates of tenure on the assumption that all single-family units and one-half of the two-family structures are owneroccupied, it can be projected that when singlefamily construction rates are high, owner-occupancy rates will also be high. Such trends are verified by statistics relating tenure and building permit data, as in Table 24. In the HMA from 1950 to 1959, a period of high single-family construction, an average of 87 percent of all new units were owneroccupied. This average decreased to 54 percent during the 1960-1966 period as the proportion of new multifamily housing increased. Since 1956 the rate of owner-occupancy in new construction in the HMA has been steadily decreasing from more than 77 percent in 1960 to about 50 percent in 1966. The increase in rental housing during this period is primarily accounted for by multifamily housing



Table 24: Buidling Permit Data by Type of Structure and Tenure, in the HMA, 1950 - 1966

<b>&gt;</b>	One-Family Structure	Structure	Two-Famil	<b>&gt;</b> .	Three or more	r more	re A11	% Owner-	% Renter-
iear -	Number	%	Number	%		%	St	Occupied	
1950	11,848	80	612	4		16	14,811	82.	18.
1951	9,570	89	504	4	3,952	28	4	70.	30.
1952-	10,047	76	474	な		20	13,305	78.	22.
1953	10,067	98	562	5	0	6	11,660	88.5	11,5
1954	10,882	94	318	ന	376	က	11,576	95.5	•
1955	11,860	96	174	-1	353	က	12,387	96.5	3.5
1956	10,944	96	88	-	332	ന	11,364	96.5	3.5
1957	7,708	95	130	7	537	9	8,375	93.	7.
1958	8,365	98	138	<b></b> 1	1,265	13	9,768	86.5	13.5
1959	10,564	98	150	-	1,625	13	12,339	86.5	13.5
				1		1		-	-
Total:	101,855	82	3,150	ന	14,606	12	119,611		
1960	9,414	76	348	m	2,654	21	12,416	77.5	22.5
1961	8,821	62	288	2	5,214	36	14,423	63.0	
1962	E, 264	51	512	ო	7,318	46	16,094		47.5
1963	7,898	49	652	4	7,697	47	16,247	51.0	
1964	•	36	852	な	13,590	09	22,440	38.0	62.0
<i>y</i> (	7,641	47	548	ო	8,128	20	16,317	48.5	1.
1966	950'9	49	266	2	6,048	49	12,370	•	0
Total:	56,192	51	3,466	lπ	50,649	45	110.307		
Total					•				
1950-1966	1950-1966: 158,047	69	9,616	ю	65,255	28	229,918		



constructed in Boston during the 1960's, as well as in the inner suburban areas of the HMA. By 1966 owner-occupancy and renter-occupancy each represented 50 percent of the total new units constructed.

In summary, annual rates of new construction have been generally increasing in the HMA. During the sixties the construction of multifamily housing underwent a considerable increase, much of which was located in the core communities. Also in the sixties the suburban communities experienced a decrease in the rate of single-family construction.

Concomitant with these changes in types of new construction was a parallel change in the tenure of new units. In the fifties about 87 percent of all new units were owner-occupied; in the sixties this percentage had decreased to about 54 percent.

Of further interest is the change in the ratio of new construction to household increase. In the fifties this ratio was 1.4:1, and during the sixties it had increased to 1.9:1. These figures indicate that in the earlier decade, approximately 29 percent of all new construction was based not on household



increase but on the demand to replace demolished or obsolete units, and that in the sixties approximately 47 percent of all new construction was in response to a demand to replace units.

Costs of Construction and Land: Average residential construction costs for one unit of new housing for the United States rose from \$8,450 in 1950 to \$14,650 in 1967, an increase of 73 percent. 1. These figures include fees for labor, materials, subcontract work and builders' overhead and profit, but do not include land costs, site improvements, sales profits, and architectural fees. The increase in the construction cost of an average dwelling unit can be attributed to labor and material cost increases, and by the fact that the average unit constructed in 1967 differed qualitatively and quantitatively from the unit constructed in 1950.

Census Bureau figures show that the wholesale price index for construction materials has increased 25 percent from 1950 to 1966. At the same time

U.S. Census Bureau, <u>Construction Reports</u>, Series C-25, U.S. Department of Commerce.



union hourly wage scales in the building trades have increased 100 percent. Since the ratio of total labor costs, approximately 32 percent, to total material costs, approximately 32 percent, in new housing construction is about 2:3, the increase in average housing unit costs caused by labor and materials alone is nearly 55 percent. 2. Housing costs, however, have increased an average of 73 percent, thereby leaving 18 percent of the increase to be explained by other factors. One of these factors is that builder overhead and profit have increased along with construction costs. Also, explaining the 18 percent difference is the steadily increasing size of new units. The average floor area for new housing construction increased from 1,435 square feet in 1963 to 1,475 in 1964; 1,523 in 1965, and 1,546 in 1966, showing that new home buyers were getting more for the increasing housing expenditures. It is probable as well that the quality of new units has been improving over the period.

<sup>2.</sup> R.S. Means Co., Inc., <u>Building Construction Cost Data</u>, 1968, p. 105.



Most builders blame the rapid rise of housing costs on labor, including "feather bedding," restrictive municipal zoning, and building codes. While all of these factors may be significant, it is difficult, with the limited data available, to place full responsibility for high costs on labor and municipal government. To absolve the home builder of any limitations or inefficiencies is difficult. The traditional domination of the building industry by the small entrepreneur whose scale of operations makes innovation and technological improvement difficult is partially the cause of the rapidly increasing costs of new construction.

While the average construction cost of all new dwelling units in the HMA rose 72 percent from 1950 to 1967, the increase in the public and private housing markets has been significantly different. 1. An average of all new privately owned units in the HMA shows a cost increase from \$8,788 in 1950 to \$15,159 in 1967, a 72.5 percent increase. The per unit cost for public housing in the HMA increased

<sup>1.</sup> R.S. Means Co. Inc., op.cit., p. 104.



from \$8,788 in 1950 to \$12,628 in 1967, an increase of only 44 percent. Between 1959 and 1967, the average annual construction cost increase in metropolitan Boston was .5 percent per year for publicly owned units; 2.3 percent per year for all new private residential construction; 3.6 percent annually for new one-unit privately owned homes. This averages out to 2.25 percent per year for all new housing. Public housing has exhibited both the lowest unit costs and the lowest annual cost increases, probably due to the efficiencies of scale possible in multiple unit structures and regulations governing the spartan nature of the finished product. Private multifamily construction costs are higher than in public housing because of the level of amenities demanded by prospective tenants, but are less than in single-family private construction because of the economies of scale available. Table 25 shows these varying rates of cost increase in the United States and in metropolitan Boston.

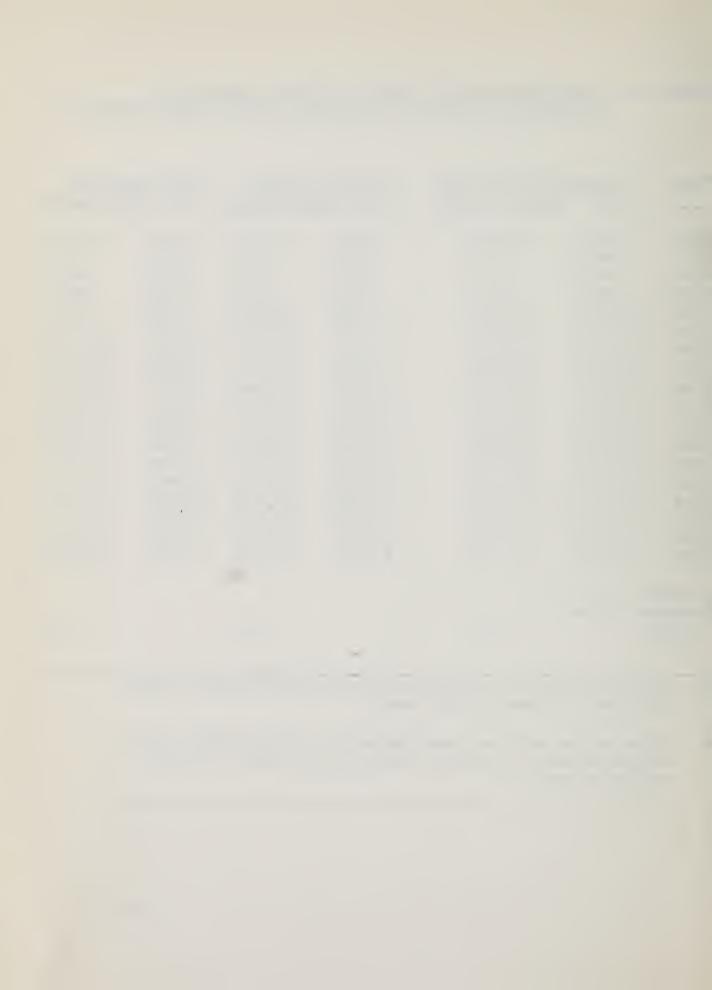


Table 25: Annual Construction Costs in United States and Metropolitan Boston, 1950-1967, excluding Farm Housing. 1.

Year		e All Housing Metro. Boston <sup>2</sup> .	Private U.S. Met	Housing ro Boston	Public H	lousing ro Boston
1950	\$8450	<b>\$ 87</b> 88	\$ 8450	\$ 8788	\$ 8450	\$ 8788
1951	8975	9334	9000	9360	8625	8970
1952	9050	9412				8944
1953			9075	9438	8600	
	9500	9880	9525	9906	8650	8996
1954	10,225	10,634	10,250	10,660	9050	9412
1955	10,950	11,388	10,950	11,388	10,225	10,634
1956	11,700	12,133	11,725	12,159	10,825	11,226
1957	12,175	12,589	12,225	12,641	11,550	11,943
1958	12.000	12,372	11,975	12,346	12,075	12,449
1959	12,400	12,747	12,400	12,747	11,775	12,105
1960	12,650	12,941	12,675	12,966	12,025	12,302
1961	12,525	12,826	12,550	12,864	11,725	12,006
1962	12,525	12,838	12,550	12,864	11,700	11,993
1963	12,625	12,952	12,625	12,952	11,875	12,184
1964	13,125	13,493	13,125	13,493	12,400	12,747
1965	13,625	14,034	13,650	14,060	12,550	12,927
1966	14,325	14,798	14,375	14,849	12,600	13,016
1967	14,650	15,133	14,675	15,159	12,225	12,628
% Annual						
Increase, 1959-						
1967	•	2.25		2.30		•50

<sup>1.</sup> Table 24 is based on permit valuation adjusted for understatement of construction costs.

<sup>2.</sup> Adjusted for metropolitan Boston U.S. construction costs multiplied by 1.04 equals construction costs for metropolitan Boston.



A recent survey conducted by the National Association of Homebuilders showed that land costs in the United States are increasing rapidly. The price of an acre of raw land increased from \$1,222 in 1950 to \$2,591 in 1960, and to \$5,475 in 1968. This represented an overall increase of about 356 percent, or an average annual increase of 19 percent. The price of finished lots increased by 185 percent over the 18-year period, from \$2,035 in 1950, \$3,331 in 1960, to \$5,808 in 1968, an average annual increase of 10 percent. The typical lot size during this period increased by 49 percent, or annually by 2.7 percent, from 7,558 square feet in 1950 to 11,281 square feet in 1968. Table 26 below shows the increases in the average lot prices and sizes purchased by builders in the United States.

Table 26: Average Land Prices Paid By Builders, U.S., 1950 - 1968

	1950	1960	1965	1968
Acre Raw Land Finished Lot	\$1,222 2,035	\$2,591 3,331	\$4,101 4,664	\$5,475 5,808
Typical Lot Size, Square Feet	7,558	8,932	10,312	11,281

<sup>1.</sup> National Association of Home Builders, Economic News Notes, Volume XIV, Number 8, August, 1968.



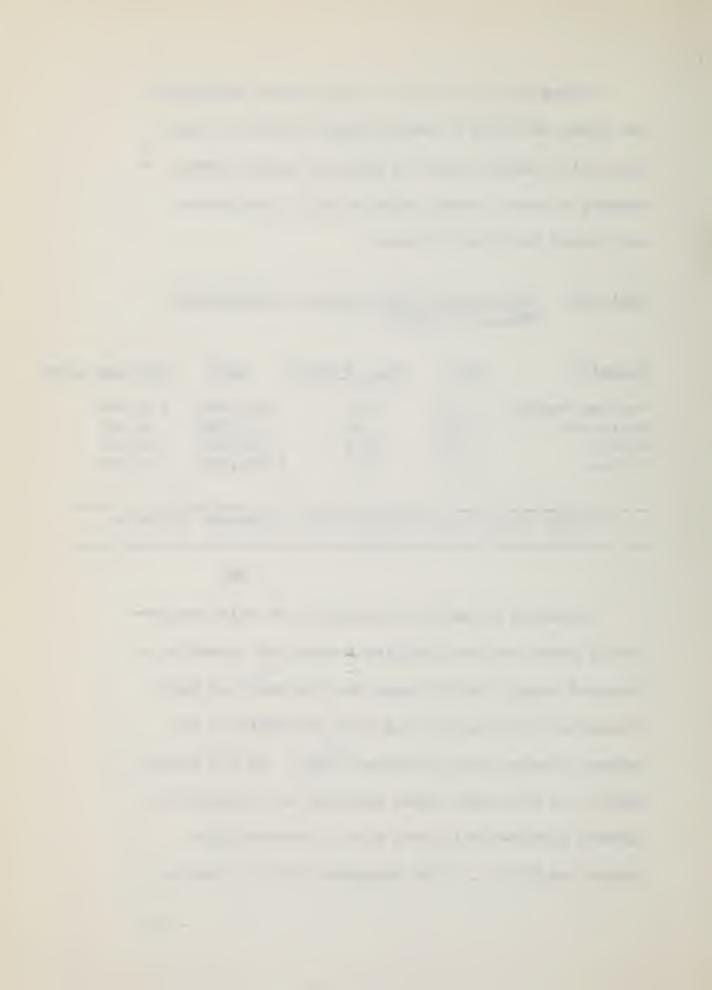
Prices paid recently by residential developers for prime raw land in metropolitan Boston are substantially higher than the averages quoted above. A summary of some recent large parcel transactions are listed in Table 27 below.

Table 27: Large Parcel Real Estate Transactions, HMA, 1966-19671.

Location	Date	No. of Acres	Cost	Cost per acre
Weston- Wayland	1/66	140	\$440,000	\$ 3,200
Lexington	6/66	16	70,000	4,400
Weston	7/66	11.7	145,000	12,400
Milton	10/67	425	1,780,000	4,200

<sup>1.</sup> Greater Boston Real Estate Board, Research Division

Summaries of sales transactions of existing onefamily homes for metropolitan Boston and summaries of
proposed single-family homes for the state of Massachusetts are collected and made available by the
Federal Housing Administration (FHA). In the fourth
quarter of 1964 the market price of an average FHA
insured single-family home site in metropolitan
Boston was \$3,219. This compares with the average



Association study for metropolitan Boston in the same period. This difference in average lot price is probably accounted for by the fact that FHA services a relatively small portion of all sales transactions, and those it does service are generally less expensive than those conventionally financed.

Both the FHA and Home Builder's Association data point to the fact that lot-size and prices are increasing. Additionally, the proportion of total housing costs attributable to land cost is increasing, and that these rapid increases in housing costs will impede the ability of low-and moderate-income families to obtain single-family houses.



## <u>Changes in the Housing Stock From Conversions</u> and Removals

In addition to new construction the total number of units in the housing stock may be changed in a variety of ways, such as by conversion, merger, demolition, or by fire, flood, or other natural disasters. Under normal conditions these factors play a relatively small role in changing the housing supply, but in the HMA since 1950 they have at times assumed major importance.

Conversion and Other Gains: Conversion refers to the process of creating two or more small units out of one large unit, usually through structural alteration. During the period April, 1950 to December, 1959 in the Boston SMSA<sup>1</sup>. 15,700 units were converted into 34,900 units for a net addition of 19,200 units, an average net increase of nearly 2,000 units per year. New construction, by comparison, added an average of 11,250 units per year during the same period. Conversions during this time almost always consisted of one large unit being converted into two smaller ones, and the additional units were nearly all

<sup>1. 1959</sup> definition of Boston SMSA.



renter-occupied or available for rent.

During the period April, 1960 to October, 1966 in the HMA it is estimated that additions to the housing supply through conversion occured at a lower rate than in the fifties. Only 8,852 units per year were added due to the declining supply of large, older units available for conversion.

A limited number of housing units enter the housing supply by means other than new construction or conversion. For example, housing units may be created by changing nonresidential structures to residential use. Approximately 760 units per year were added to the housing stock in the Boston SMSA by changes in use during the 1950's. It is estimated that for the HMA the annual rate was 1,132 units per year from April, 1960 to October, 1966.

Demolitions: Demolitions occur when housing units are deliberately removed. Demolitions may occur because of public action, such as highway construction and urban renewal, or through private action.

Large-scale demolition programs contribute to the housing shortage. Because demolished units are frequently low-rent units, demolition programs often



create relocation problems for low-income households. For this reason it is of special interest to investigate the characteristics of units that have been demolished in the past.

Between April, 1950 and December, 1959 approximately 13,610 units in the Boston SMSA were removed from the housing stock through demolitions. This represented a demolition rate of nearly 1,400 units per year. The vast majority, over 95 percent of all units demolished, had been occupied immediately prior to demolition. The vacancy rate of 4.6 percent in these units is comparable to an average vacancy rate for all units of 3.2 percent in 1950 and 6.0 percent in 1960. Of all occupied demolished units nearly 88 percent had been renter-occupied. This compares with a rental occupancy rate of 55 percent for all housing units in the SMSA in 1960.

The average condition of the demolished renter units was much worse than the average condition of all renter units in the housing stock. Forty-nine percent of all renter units lost through demolition over the decade were classified as dilapidated or lacking some or all plumbing facilities, compared with



a rate of 16.8 percent for the total rental stock in 1950 and only 12.5 percent in 1960. In contrast, none of the owner units demolished during this period, about 12 percent of all demolished units, were in the categories of dilapidated or lacking some or all plumbing. The condition of demolished units is shown in Table 28.

The median rent paid for all renter units was \$52.00 in 1950 and in 1960 was \$82.00, while the median rent paid for the units which were demolished was only \$43.00. The effect of demolitions was, therefore, to reduce the supply of low-cost housing.

Although a greater proportion of nonwhite house-holds was affected by demolitions during the decade, demolished units had been predominantly occupied by white households. White households, accounting for nearly 89 percent of all occupied, demolished units, made up nearly 97 percent of the total households in the SMSA. Nonwhite households, occupying over 11 percent of the demolished units, were only 3.4 percent of the total households in 1960. These patterns are shown in Table 29 below.



Table 28: Condition of Units Lost Through Demolition, Boston SMSA, 1. April, 1950 to December, 1959

	Number	Percent
All units demolished		
with 1950 records available	12,765	100.0
Total occupied units	12,183	95.4
Not dilapidated	10,956	85.8
With all plumbing	7,282	_
Lacking some or all plumbing	3,674	
Dilapidated	1,809	
Owner-occupied units	1,515	100.0
Not dilapidated	1,515	100.0
With all plumbing	1,515	100.0
Lacking some or all plumbing Dilapidated		
Renter-occupied units	10,668	100.0
Not dilapidated	8,894	83.4
With all plumbing	5,438	
Lacking some or all plumbing	3,456	
Dilapidated	1,774	16.6
Vacant	582	4.6

<sup>1. 1959</sup> definition Boston SMSA.



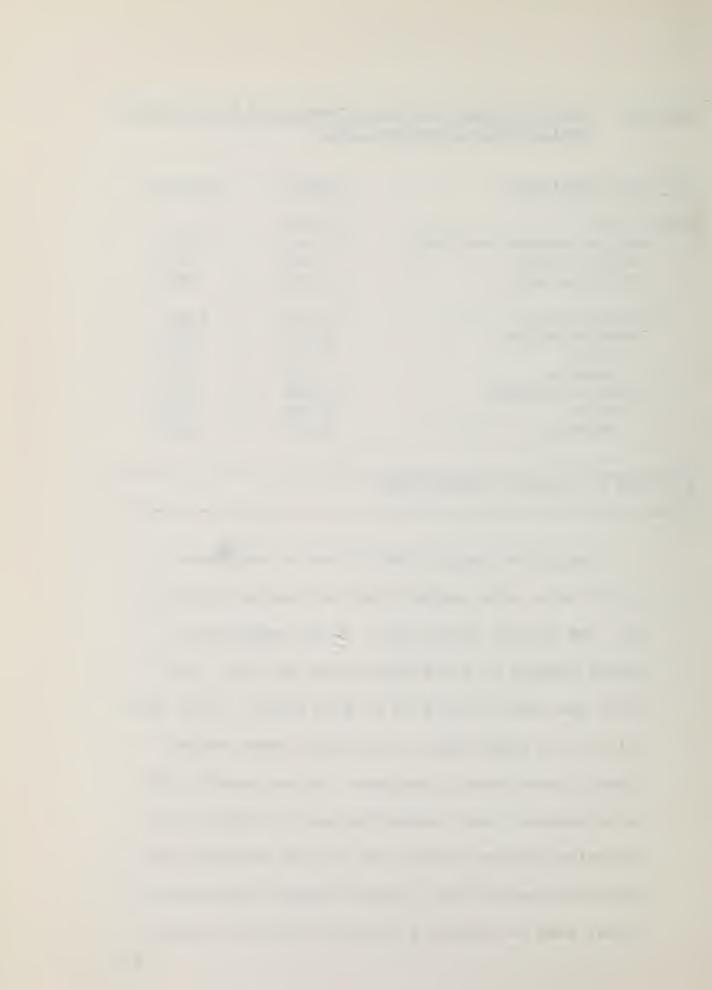
Table 29: Characteristics of Units Demolished Boston SMSA, April, 1950 to December, 1959

All Units Demolished	Number	Percent
Total units  Detailed records available  Vacant units  Occupied units	13,610 12,765 582 12,183	100.0 4.6 95.4
Occupied units Owner-occupied White Nonwhite Renter-occupied White Nonwhite	12,183 1,515 1,417 98 10,668 9,385 1,283	100 12.4 11.6 0.8 87.6 77.0 10.6

1. 1959 definition, Boston SMSA

During the period 1960 to 1966 an estimated

19,765 units were removed from the housing supply in
the HMA through demolitions. This represents an
annual average of 3,040 demolitions per year, over
twice the rate of the 1950 to 1959 period. More than
half of the total units, 55 percent, were removed
through urban renewal projects. An estimated 2,750,
or 14 percent, were removed because of highway construction programs during the six and one-half years.
Thirty-one percent were removed through other demolitions, such as voluntary private actions and govern-



mental condemnations. Generally, demolitions averaged about 3,000 per year in the HMA during 1960 to 1966, as compared with about 1,400 units annually from 1950 to 1959. Table 30 shows the causes of demolitions in the HMA from 1960 to 1966.

Merger and Other Losses: Units may also be lost from the housing supply due to mergers, change to non-residential use, vacancy because units are scheduled for demolition, or destruction by fire, flood, or other disaster.

Mergers, the process of combining two or more dwelling units through structural alteration or change in use, resulted in 9,200 unit losses to the housing stock in the Boston SMSA between April, 1950 and December, 1959. The 9,200 units lost, representing an annual rate of approximately 950, were predominantly renter-occupied prior to merger.

From 1950 to 1959 more units were lost through other causes than demolitions and mergers combined.

Over 22,300 units were lost in this way, for an average rate of 2,200 units per year.

It is estimated that the loss of housing units through mergers and other losses has declined since

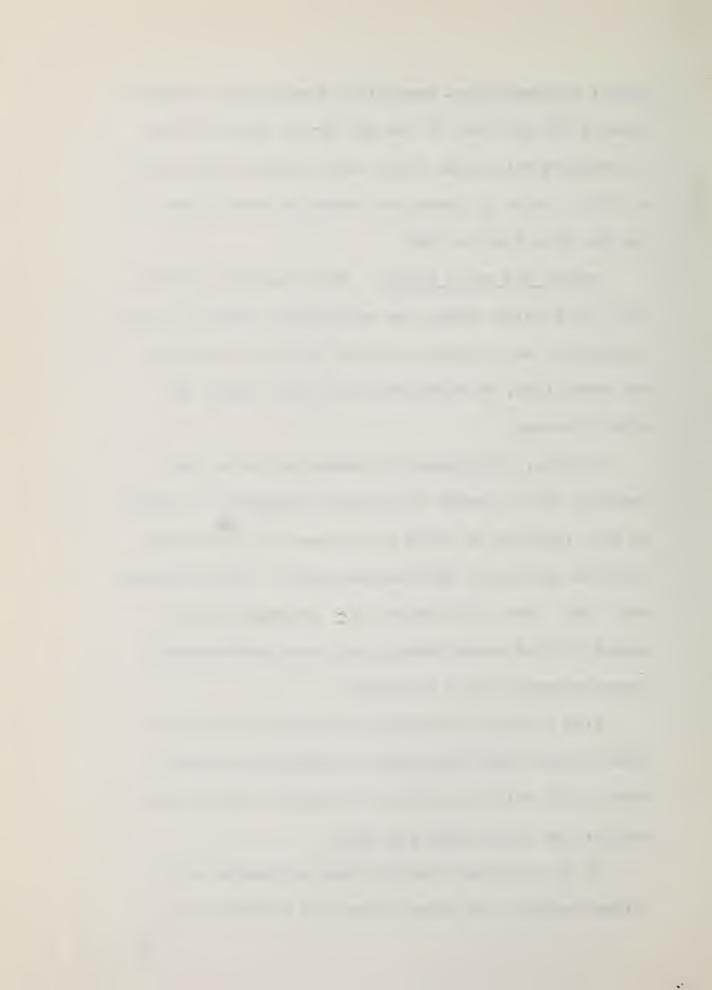


Table 30: Estimated Demolitions in the HMA, April 1960 to October, 1966.

	Number	Percent
Urban Renewal	10,940	<b>5</b> 5
Boston	8,515	<b>3</b> 5
New York Streets	998	
West End	3,510	
Washington Park	2,400	
Government Center	989	
North Harvard	28	
South End	150	
Whitney Street	437	
Jamaicaway	3	
Cambridge	200	
Brookline	350	
Malden	810	
Somerville	330	
Chelsea	100	
Lynn	135	
Medford	30	
Revere	120	
Brockton	350	
Highways	2,750	14
Boston and Newton	2,250	
Somerville	350	
Arlington	60	
Belmont	50	
Lexington	15	
Other	25	
All other demolitions,		
including private	6,075	31
Boston	2,000	
Other	4,075	
Total demolitions:	19,765 0	r 3,040 annually

<sup>1.</sup> Federal Housing Administration, Department of Housing and Urban Development, Analysis of the Boston,

Massachusetts Housing Market, October 1, 1966. Area included in this study is equal to the HMA less 14 communities. MAPC data for Brockton is added to the FHA data.



1960, although documentation of this trend is difficult.

Housing units lost through causes other than demolitions had characteristics similar to those lost

through demolition. Such units were generally in

worse condition than the housing stock as a whole

and tended to be low-rent units. While the U.S

Census does not explain the causes of losses other

than through demolitions, it is possible that many

of these units were located in urban renewal areas,

vacant and awaiting demolition.

Net changes in the housing stock are shown in Table 31. Between 1950 and 1959 in the Boston SMSA there was a net addition to the housing stock of 84,562 units or approximately 8,763 a year. Most of these additional units were the result of new construction, at an average rate of 10,577 units a year. The greatest source of losses to the housing stock was 2,202 units annually from losses through causes other than mergers or demolitions. The HMA as a whole gained a net total of 93,566 units between 1960 and 1966, or an average gain of 13,272 units a year. While most of this gain, 102,224 units, is attributed to

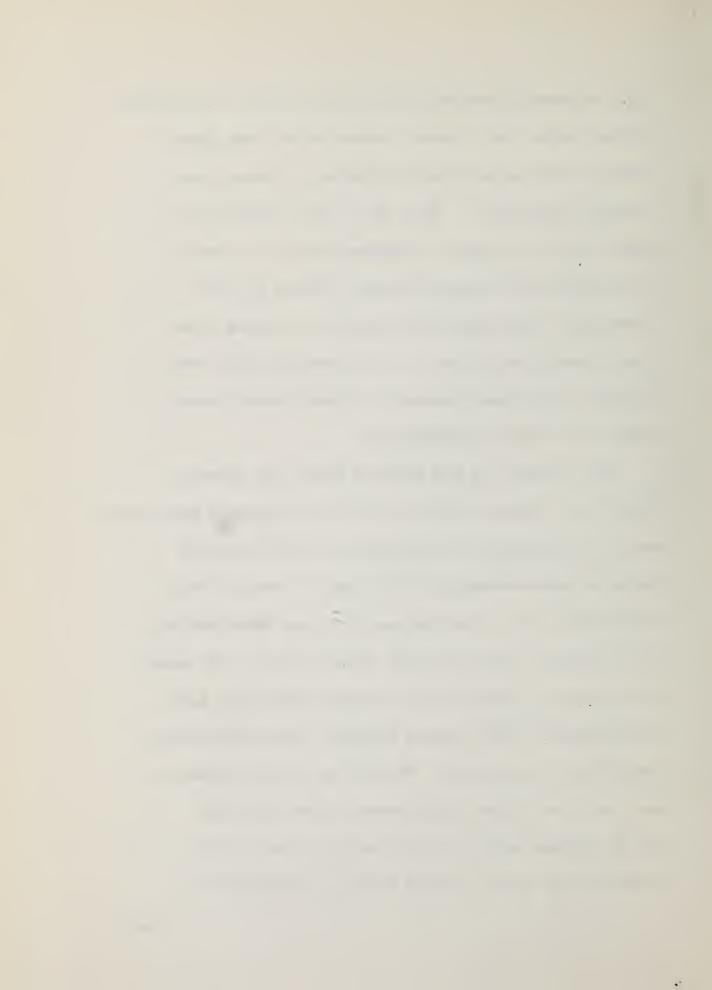
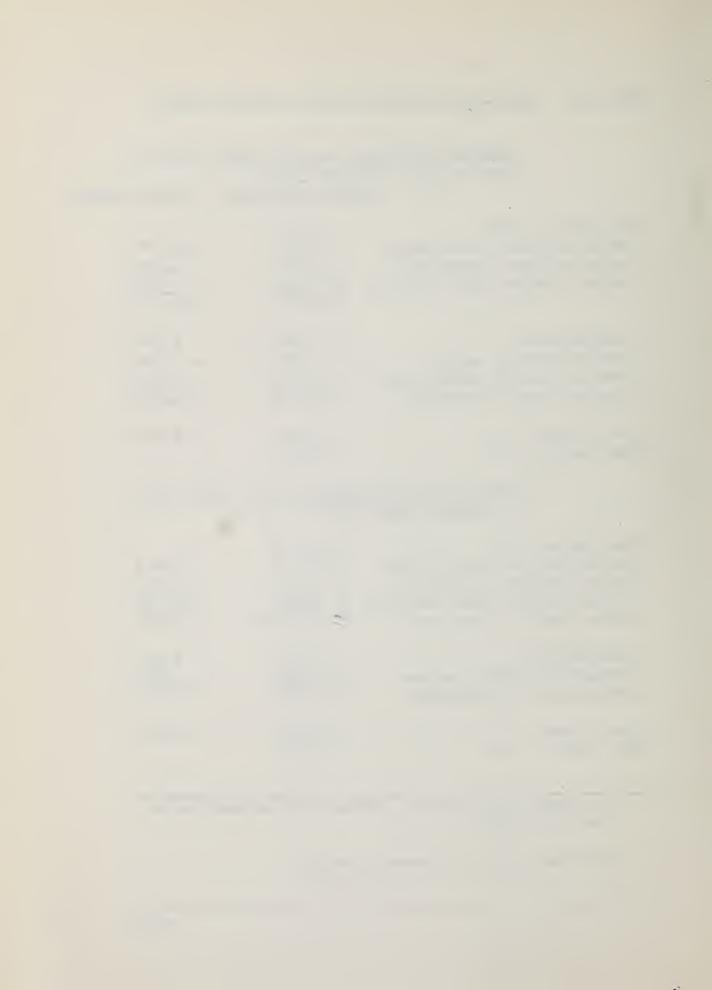


Table 31: Changes in Housing Supply, 1950 to 1966.

Changes in Housing Supply, April 1950 to				
December 1959, Boston, SMSA1.				
Lo	osses and Gains	Annual Change		
Total Units, 1950	687,843			
Estimated new construction	+103,123	+10,577		
Gains through conversion	+ 19,192	+ 1,968		
Gains through other sources	+ 7,419	+ 761		
	+129,734	+13,306		
Demolitions	12 606	1 200		
Losses through merger	- 13,606	<b>- 1,396</b>		
Losses through other causes	- 9,213	- 945		
Losses from all sources		<u>- 2,202</u>		
Losses from all sources	- 45,172	- 4,543		
Net Change	+ 84,562	+ 8,763		
Total units, 1959	772,405	·		
a,				
Changes in the Ho		ril 1960		
to October 1966,	HWA			
Total units, 1960	876,432			
Estimated new construction	+102,224	+14,603		
Gains through conversion	+ 8,852	+ 1,362		
Gains through other sources	+ 7,360	+ 1,132		
Gains from all sources	+113,436	+17,097		
Demolitions	- 19,765	<b>-</b> 3,040		
Mergers and other losses	<del>-</del> 5,105	<del>- 785</del>		
Losses from all sources	<b>-</b> 24,870	- 3,825		
Net Change	+ 93,566	+13,272		
Total units, 1966	969,998	20/2/2		
The same of the sa	000,000			

<sup>1. 1959</sup> definition Boston, SMSA, 1950 definition of dwelling units.

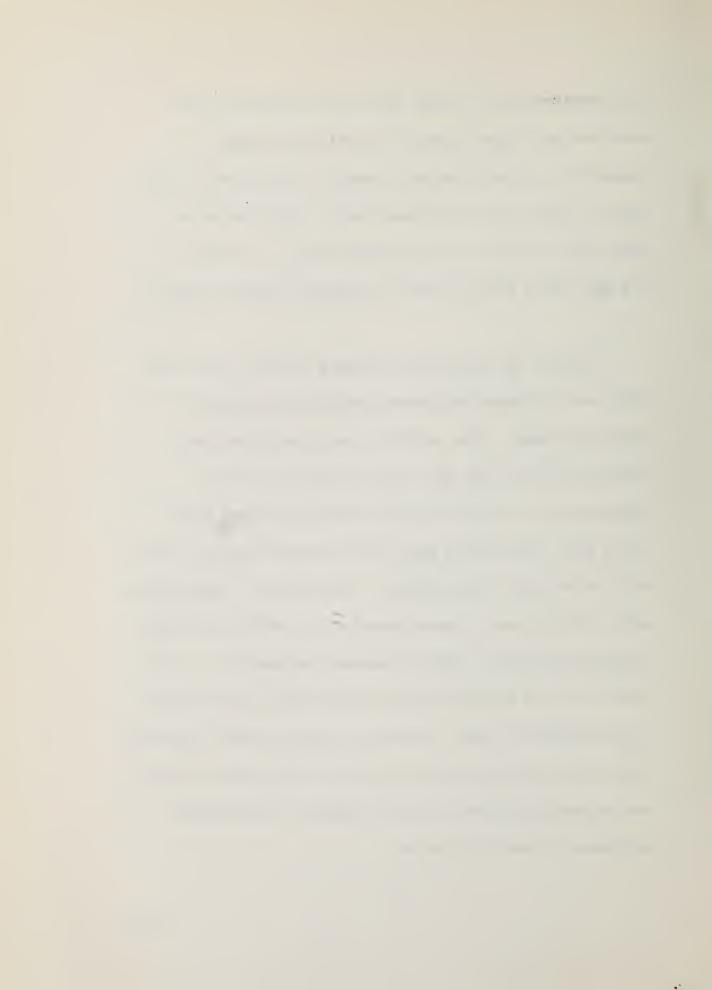
<sup>2. 1960</sup> definition of housing units.



new construction, 16,212 units were added by conversions and other changes in existing stock.

Losses to the total housing supply in the HMA in the 1960 to 1966 period averaged about 3,825 units a year, most of this due to demolitions. By 1966 the HMA had a total stock of 969,998 housing units.

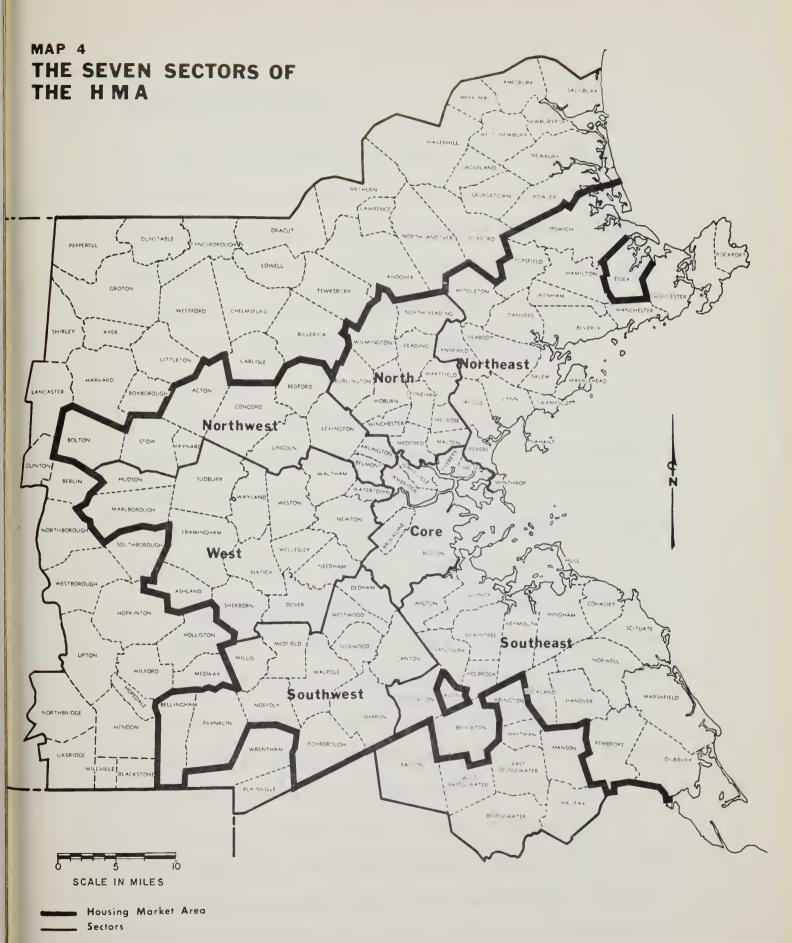
Changes in the housing supply between 1950 and 1967 have affected different population groups in different ways. The swiftly rising costs of new construction in the HMA, from \$8,450 in 1950 to approximately \$14,650 in 1967, indicates that households most benefiting from new construction are those with relatively high incomes. Conversely, demolitions most affect lower income households, and among these, disproportionately affect nonwhite households. trends in the housing supply cannot help but indicate future problem areas. Despite rising incomes, shelter costs for many households outstrip increasing incomes, and expenditures for housing consume ever greater portions of monthly income.



## FUTURE HOUSING TRENDS

The demand for housing in the future as in the past will be essentially a function of population size, household characteristics, income levels, and tenure preferences. The supply of housing will depend upon the survival of existing housing, rates of new construction, and conversions and losses to the housing stock. In this section future housing trends in the Housing Market Area are estimated for the period 1960 to 1980, based on projections of the various components of housing supply and demand. The projections reflect past supply and demand trends, and assume no major changes related to the housing market. Unanticipated variances in population growth, household formation, and income would alter demand expectations. Likewise major changes in governmental policy, public investment, financial conditions, construction technology, and forms of private development would substantially influence future housing supply.





The preparation at this map was financially aided through a Federal grant from the Department of Housing and Urban Development under the Urban Planning Assistance Program authorized by Section 701 of the Housing Act of 1954, as amended



#### FUTURE HOUSING DEMAND

Housing demand for the period 1960 to 1980 as discussed in this chapter is based upon past trends in housing demand. The projections of demand represent estimates which are subject to change due to unexpected variations in the basic components of housing demand: population, households, income and tenure.

# Population

Projected population growth in the Housing Market

Area is not uniform throughout the area. Geographical

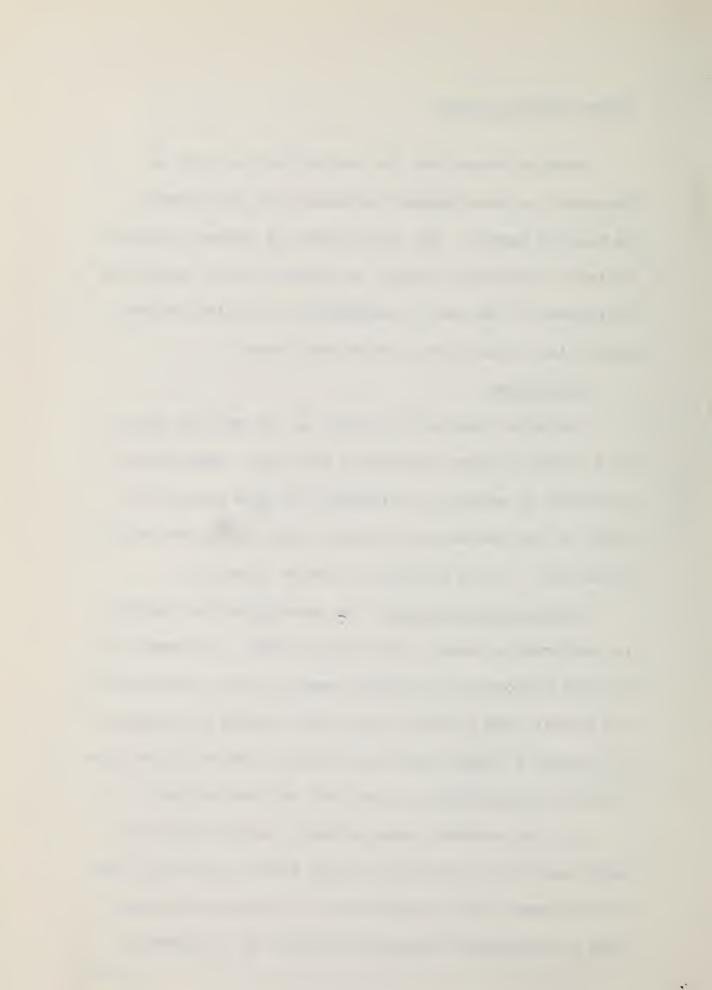
variances in growth are discussed in this section in

terms of the geographical sectors into which the HMA can

be divided. These sectors are shown in Map 4.

Projected Population: The population for the HMA is projected to total 3,393,000 by 1980, an increase of 594,700 persons or 21 percent over the 1960 population. The annual rate of growth over this period is forecast to average a little over one percent, lowest in the sixties and accelerating in the 1970 to 1980 period.

All the sectors shown on Map 4, except the core, will experience population growth between 1960 and 1980. The Southwest sector will incur the greatest increase with an anticipated population growth of 75 percent.



The second highest rate of growth, up to 55 percent, will occur in the Southeast sector. The Core is expected to decline in population from 1960 to 1970, but is projected to increase modestly during the 1970's.

Three distinctive growth patterns are evidenced in the six radial sectors. The Northeast and North sectors show an average increase of approximately 27 percent, the Northwest and West show an average increase of 36 percent, and the Southwest and Southeast show an average increase of 60 percent.

Relative changes in the geographical distribution of population will be substantial. In the Core, the relative proportion of total population is projected to decrease from almost 37 percent in 1960 to 27 percent in 1980. The only other sector to experience a relative decline will be the North and its relative loss between 1970 and 1980 is minor. All other sectors will increase their relative share of the HMA's population. Absolute and relative population changes are shown in Table 32.



Absolute and Relative Population Growth in the HMA by Sectors, 1960-1980 Table 32:

80 %	.9. 1.0. 1.0. 3.8	
1960-1980 No.	-109,400 118,000 75,200 64,300 130,100 102,800 213,700	
%	27.1 15.5 11.0 6.5 15.0 7.1	100.0
1980 No.	920,900 526,300 372,900 218,800 509,600 239,900	3,393,000 100.0
%	-5.7 .7 .5 .6 .8	
1960-1970 No.	-80,300 60,200 40,400 31,300 59,700 45,600	
%	31.1 15.3 11.1 6.1 16.0	100.0
1970 No.	950,000 468,500 338,100 185,800 439,200 182,700 488,200	3,052,500 100.0
%	36.8 14.6 10.6 5.5 13.6 4.9	100.0
1960 No.	1,030,300 408,300 297,700 154,500 379,500 137,100	Total: 2,798,300 100.0 3,
Sector	Core Northeast North Northwest West Southwest	Total:

1. MAPC, Projected Population 1990, April, 1968.

ECYP

## Households

The number of households in the HMA in the projection period 1960 to 1980 is an important way of determining absolute demand for housing units regardless of household income levels. Distinctions between types of households, such as size, income, and race, further define projected household demand.

Household Characteristics: The number of households in the HMA is projected to total 1,019,800 by 1980, an increase of 188,000 or 23 percent above the 1960 level. The proportion of primary individuals to total households will increase from about 16 percent in 1960 to almost 21 percent in 1980. Nonwhite families and non-white primary individuals will experience the greatest growth rates, nonwhite families increasing 96 percent and nonwhite primary individuals increasing 83 percent. White families will increase at a much slower rate of 15 percent and white primary individuals at a rate of 49 percent between 1960 and 1980. These characteristics are shown in Table 33.

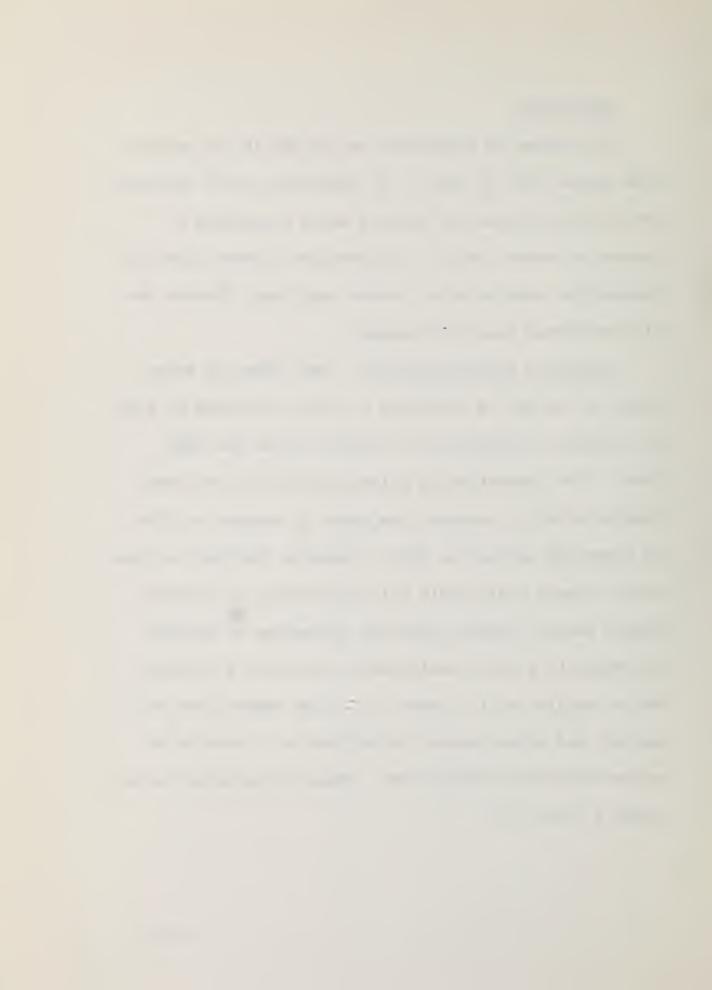


Table 33: Projected Number and Types of Households in the HMA, 1960-1980

	1960	1970	1975	1980
White Families	804,900	869,400	916,800	968,000
Primary Individuals	670,800 134,100	700,100 169,300	731,400	768,800 199,200
Nonwhite Families	26,900 19,800	37,600 28,000	44,100 33,000	51,800 38,800
Primary Individuals	7,100	9,600	11,100	13,000
Total Households:	831,800	907,000	960,900	1,019,800

The ratio of male household heads to female household heads will not change appreciably between 1960 and 1980. In 1960, there were 3.8 households headed by a male for every one headed by a female, and by 1980 this ratio is expected to decrease to 3.1:1. Among nonwhite households there were 2.2 headed by a male for every one headed by a female in 1960, and the projected ratio for 1980 is nearly identical at 2.1:1. The difference between these ratios points out the higher incidence of male-less households among the nonwhite population.

In both 1960 and 1980 the largest proportion of all male household heads is in the 45 to 64 year age group. For nonwhite male household heads the largest proportion in both 1960 and 1980 is in the under 35 age group. Nonwhite female household heads are also con-



centrated in the under 35 and 35 to 44 year age groups.

The greater proportion of young nonwhite household heads reflects the fact that the nonwhite population in the HMA is younger than the white population.

In the over 65 age group, the proportion of all male and all female households, particularly the latter, is much higher than for the nonwhite male and female households in the 65 and over categories. Table 34 shows the percent distribution of households by sex, age, and race for the projection period.

A slight shift in household size toward smaller households is predicted by 1980. The percentage of one and two person households will increase from over 41 percent of the total in 1960 to 42.5 percent in 1980. Six or more person households will decrease from 10.7 percent to 9.5 percent. This shift can be accounted for partly by an expected 50 percent increase in primary households during the projection period.



Table 34: Percent Distribution of Households and Primary
Individuals by Sex, Age, and Race of Head in
the HMA, 1960-1980

Households					
	1960 1970		1980	1980	
	Total Non	white Total	Nonwhite	Total Nor	nwhite
Male					
Under 35	23.3 32	.2 25.3	35.2	32.5	41.4
35-44	23.6 26			18.6	20.1
45-64	38.2 30	-		34.1	29.7
65+	14.9 10				8.8
	14.5 10	.0 13.3	J • J	14.0	0.0
Total No.:	659,200 18	8,600 689,6	00 25,300	772,400	35,300
Female					
Under 35	9.8 26	.5 13.8	34.2	19.3	40.6
35-44	11.4 22			9.8	17.0
45-64	41.0 33			28.9	24.8
65+	37.8 16			42.0	17.6
	2,10 20		13.4	42.0	17.0
Total No.:	172,600	3,300 217,4	00 12,300	247,400	16,500
	Prin	mary Individ	uals		
Male					
Under 35	21.5 26			38.7	47.6
35-44	12.5 21			8.5	12.7
45-64	35.9 36		33.3	26.9	27.0
65+	30.1 15	.8 29.8	14.6	26.9	12.7
Total No.:	48,800	3,800 55,70	00 4,800	67,400	6,300
Female					
Under 35	8.7 12	.1 10.9	16.7	14.4	22.3
35-44	6.9 18			4.2	10.4
45-64	39.4 42			28.2	34.4
65+	45.0 27			53.2	32.9
Total No.:	92,400	3,300  123,20	00 4,800	144,800	6,700

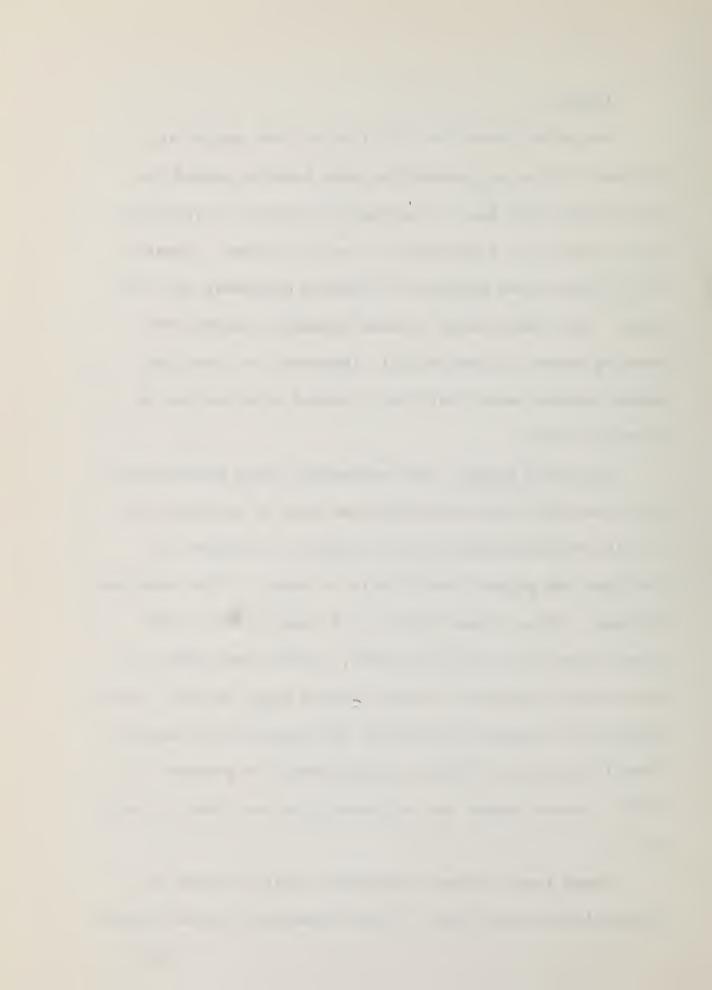


### Income

Projected income for the 1960 to 1980 period is a critical factor in determining what housing demand for that period will be. A household is strongly influenced in its choice of a housing unit by its income. Housing cost, tenure, and location is largely dependent upon income. The relationship between household income and housing demand is particularly important for families whose incomes permit only very limited alternatives in housing choice.

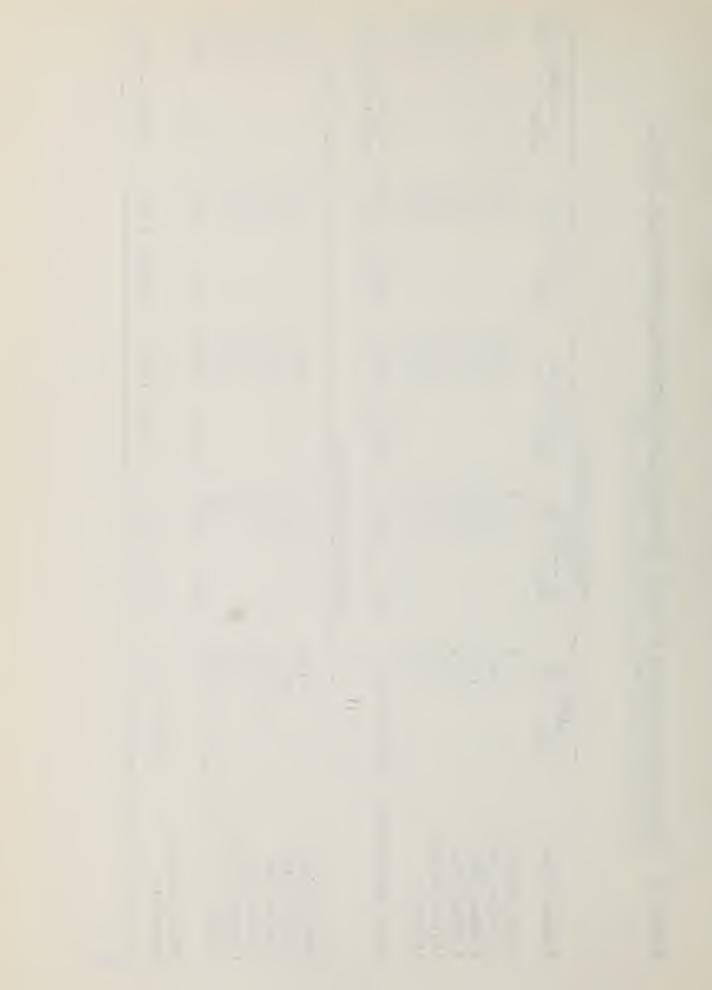
Household Income: The projected income distribution of households within the HMA shows both an absolute and a relative improvement in the financial condition of families and primary individuals in terms of 1960 constant dollars. While almost half of all households in 1960 have incomes of less than \$6,000, by 1980 only about 22 percent are projected to have incomes below \$6,000. Households with incomes over \$10,000 are projected to increase from 18 percent in 1960 to approximately 54 percent in 1980. Income trends for all households are shown in Table 35.

Among lower income households rising incomes are particularly significant. These households can be divided



Percent Distribution of Total Heuseholds and Nonwhite Households by Income, 1960 Constant Dollars, in the HMA, 1960 - 1980 Table 35:

1980 %	9.8 11.9 11.5 12.5 26.3	1,019,800 100.0	18.5 28.0 14.0 12.0 17.5	51,800 100.0
1975 No. %	11.8 13.7 13.5 15.0 25.5	960,900 100.0	22.5 30.0 14.0 12.5 14.5	44,100 100.0
1970 % No. %	14.0 18.0 17.0 15.5 22.0	907,000 100.0	29.2 30.8 15.8 9.8 10.6	37,600 100.0
Total Households 1965 No. % N	16.7 24.2 18.4 13.9 17.1	855,500 100.0 907	35.3 32.8 14.0 7.9 7.5	31,500 100,0
1960 No. %	19.3 30.5 19.7 12.4 12.1 6.0	831,800 100.0	41.4 34.7 12.2 6.1 4.4	26,900 100.0
Income Class	Under \$3,000 \$3,000-5,999 6,000-7,999 8,000-9,999 10,000-14,999 15,000 +	Total Households:	Under \$3,000 \$3,000-5,099 6,000-7,999 8,000-9,999 10,000-14,999 15,000 +	Total Nonwhite Household:



into three categories; the hard core indigent, the impoverished and the working class. Current definitions of these three categories are found in Table 36.

Table 36: Low-Income Households Defined by Household Income, 1965

	Household Size			
Category	1 & 2	3 - 5	6 or more	
Hard Core Indigent Impoverished Working Class	\$0-1,999 2,000-4,999 5,000-6,000	\$0-2,999 3,000-4,999 5,000-8,000	\$0-3,999 4,000-5,999 6,000-10,000	

Over the projection period households in the hard core indigent category are expected to decrease by 48 percent, the number of impoverished households will decrease by 50 percent, and the working class by 39 percent. Trends among these lower income households are shown in Table 37.

Although the incomes of both white and nonwhite households will increase at about the same rate, increases in incomes will not be evenly distributed throughout the population. Nonwhite households are currently at lower income levels than their white counterparts. If past trends for nonwhite incomes

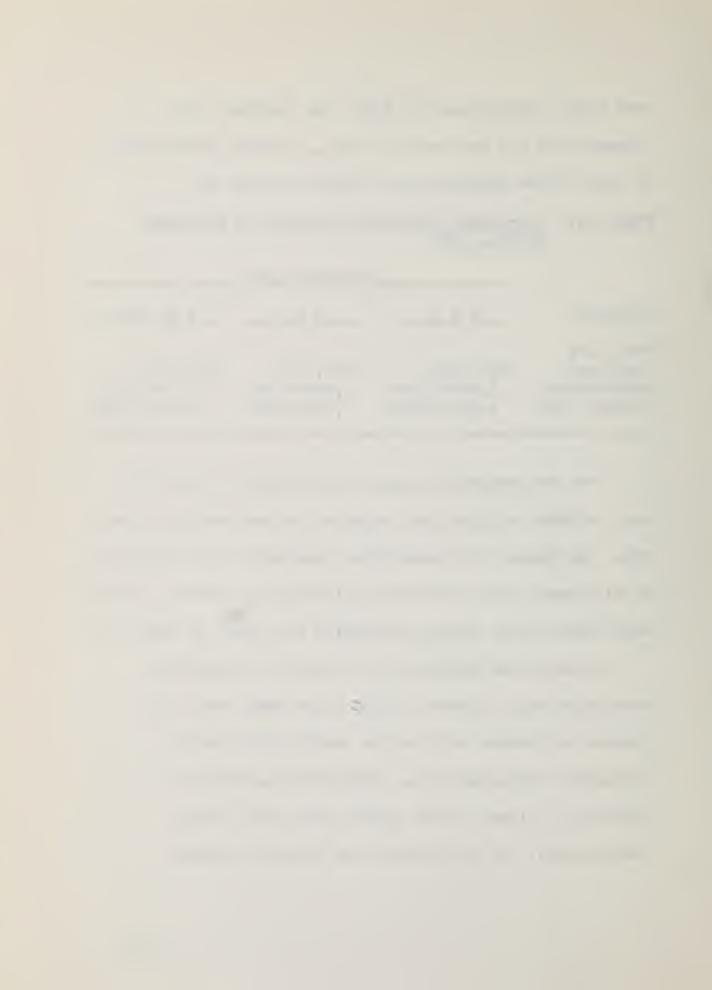


Table 37: Trends Among Lower Income Households, in 1960 Constant Dollars, in the HMA, 1960-1980

	Household Size					
	1960					
Category	1 + 2	3 - 5	6 or more	Total		
Hard Core Indigent	85,700	32,500	7,400	125,600		
Impoverished Working Class	•	61,500 149,700	20,000 35,000	198,800 219,600		
Total:	237,900	243,700	62,400	544,000		
		1	970			
Hard Core Indigent	70,800	22,600	5,400	98,800		
Impoverished Working Class	81,700	35,500 124,200	10,900 31,900	128,100 180,500		
Total:	176,900	182,300	48,200	407,400		
		1	980			
Hard Core Indigent	55,000	17,300	3,100	75,400		
Impoverished Working Class	66,300 18,400	26,600 91,700	7,100 23,400	100,000		
Total:	139,700	135,600	33,600	308,900		



continue, they are expected to remain at lower levels over the projection period. Table 38 shows actual median incomes for 1960 and projected median incomes to 1980 for families and households. Table 39 gives the percent distribution by size and income for all households in the HMA. Both tables confirm rising incomes, but point out the discrepancy between white and black household incomes.

Table 38: Comparison of Median Incomes of White and Nonwhite Households, in 1960 Constant Dollars, in the HMA, 1960 - 1980

	1960	1970	1980	
White House- holds	\$6103	\$8300	\$11200	
Nonwhite Households	3614	4900	6000	
White Families	\$6752	\$9100	\$12300	
Nonwhite Families	4447	6000	7900	

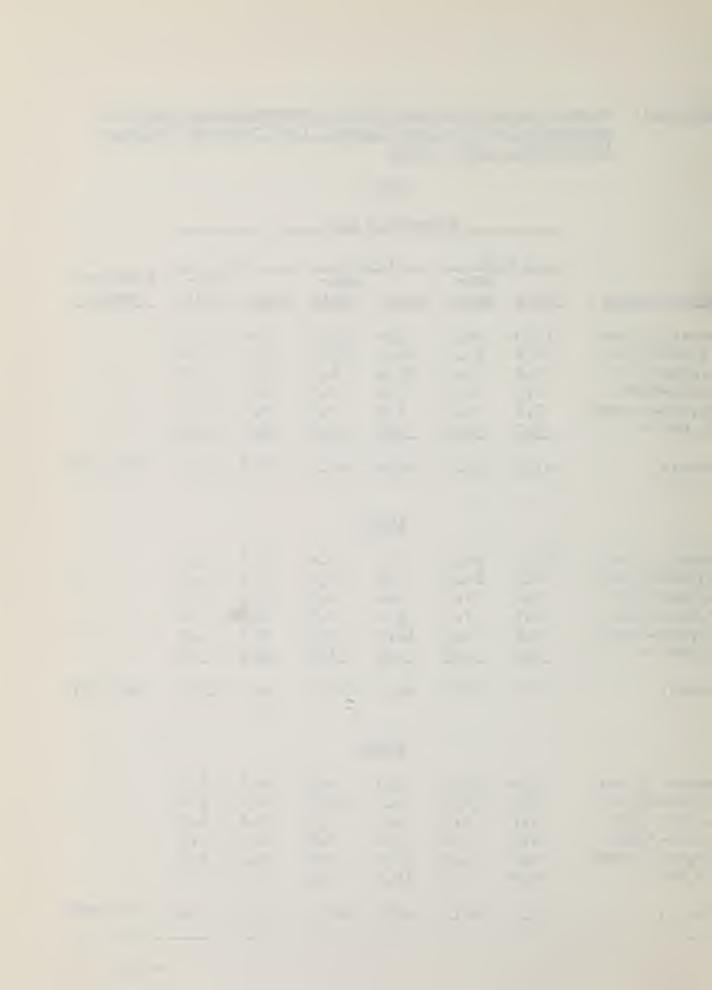
By 1980 household incomes for both white and non-white households will have undergone substantial increases. By 1980 only 10 percent of all households will have incomes of less than \$3,000, and only 18.5



Table 39: Percent Distribution of Total Households and Nonwhite
Households by Size and Income, 1960 Constant Dollars,
in the HMA, 1960 - 1980

### 1960

	Household Size						
	1 &	2	3 - 5		6	+	
		Non-	Non-		Non-		Absolute
Income Class	Total	white	Total	white	Total	white	Total
Under \$3,000	15.0	26.7	3.9	12.1	0.4	2.6	
\$3,000-5,999	13.6	15.2	14.0	14.7	2.9	4.8	
6,000-7,999	5.8	3.6	11.4	6.7	2.5	1.9	
8,000-9,999	3.3	1.4	7.4	3.3	1.7	1.4	
10,000-14,999	2.3	0.5	7.8	2.7	2.0	1.2	
15,000 +	1.3	0.3	3.5	0.5	1.2	0.4	
Total:	41.3	47.7	48.0	40.0	10.7	12.3	831,800
<u>1970</u>							
Under \$3,000	11.2	19.3	2.5	8.4	0.3	1.5	
\$3,000-5,999	8.3	14.2		13.0			
6,000-7,999	5.8	5.7		8.0	1.8		
8,000-9,999	5.1	3.3	8.7	4.9	1.7	1.6	
10,000-14,999	6.9	3.5	12.4	5.3		1.8	
15,000 +	4.5	1.5	7.1	1.7		•6	
Total:	41.8	47.5	48.3	41.3	9.9	11.2	907,000
<u>1980</u>							
Under \$3,000	8.0	12.9	1.7	4.9	0.1	0.7	
\$3,000-5,999	5.7	13.1	5.3	12.1	0.9	2.8	
6,000-7,999	4.1		6.3	7.2	1.1	1.5	
8,000-9,999		4.6	6.9	5.8	1.2	1.6	
10,000-14,999			13.8		2.9	2.1	
15,000 +	10.7	4.5	14.0	4.4	3.3	1.1	
Total:	42.5	47.2	48.0	43.0	9.5	9.8	1,019,800



percent of the nonwhite households will have incomes below this level. This is an increase from 19 percent and 41 percent, respectively, in 1960.



#### Tenure

The most basic consumer choice in the housing market is that between renting and owning. Many factors enter into this decision, such as desire for privacy, reliance upon public transportation, cultural and neighborhood identification, and characteristics of the head of the household. Most of these variables are themselves dependent upon two basic factors, namely household size and household income. The relationship of these variables to tenure was discussed in some detail in "Historical Housing Patterns: Characteristics of Housing Demand". At this point it is only necessary to emphasize the significance of the variables and to present the relative estimates for 1960 to 1980.

Renter and Owner-Occupancy: The proportion of total households expected to be renters will decline to 382,900, or 38 percent of all households. By 1980 the proportion of owners will rise to 62 percent, or 636,900 households. These figures represent a definite change in earlier tenure patterns. In 1960, in the Boston SMSA, approximately 48 percent of all units were renter-occupied and 52 percent



were owner-occupied.

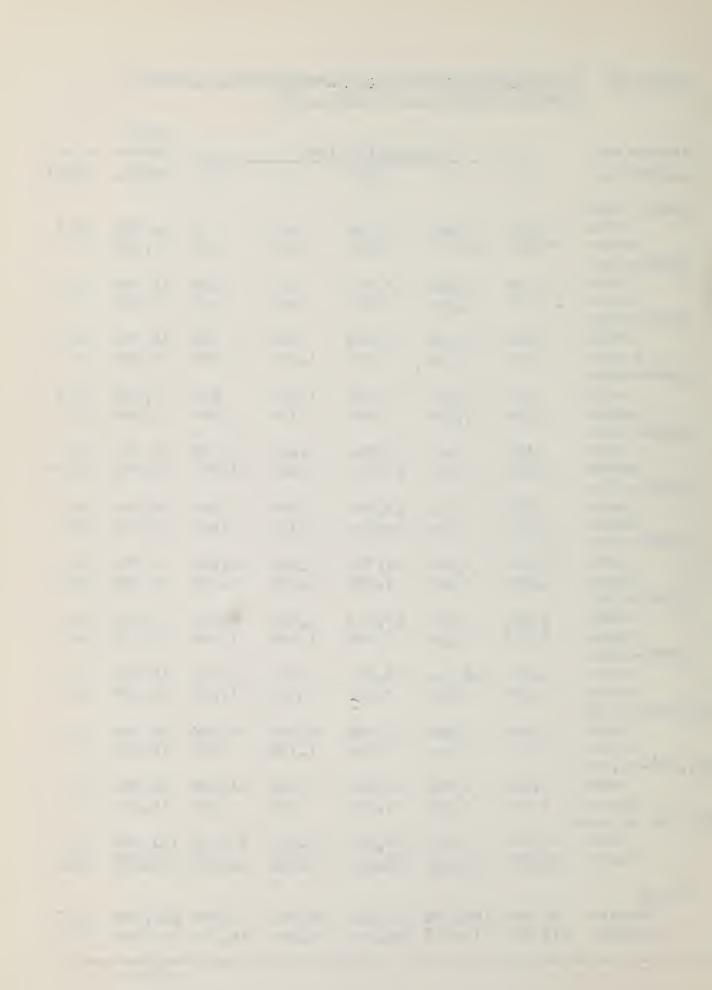
As is to be expected from past trends, the percentage of owner-occupants increases as house-hold income increases. Conversely, among lower income households there will be a tendency for the proportion of renters to remain stable or increase only slightly, because rising costs of home-owner-ship are expected to outstrip rising incomes.

A more detailed description of tenure can be derived from Table 40, which shows the total number of households expected in each income-household size cell, and the percent distribution of total renters or owners in each income class by household size.



Table 40: Projected Distribution of Households by Tenure, Size, and Income in the HMA, 1980

Income and Household Size				Total House-	% of		
Tenure	1	2	3&4	5	<u>6</u> +	Holds	Total
Under \$2000							
Owner	( 200	0.000				3.5 70.0	07.7
Renter	6,300 29,400	9,000	1,000	400	7.00	16,700	27.3
\$2000-2999	25,400	10,300	3,100	1,600	100	44,500	72.7
Owner	1,700	6 200	2 700	200	100	11,000	28.4
Renter	11,600	6,300	2,700 7,500	200 800	900	27,700	71.6
\$3000-3999	11,000	6,900	7,300	800	900	27,700	71.0
Owner	1,200	6,000	2,700	500	300	10,700	30.0
Renter	9,000	6,300	6,500	1,500	1,700	25,000	70.0
\$4000-4999	2,000	0,300	0,300	1,500	1,700	23,000	70.0
Owner	900	5,600	4,700	1,000	800	13,000	36.4
Renter	5,200	5,600	7,600	2,100	2,200	22,700	63.6
\$5000-5999		3,000	., 000	2,200	2,200	22,.00	
Owner	900	6,800	10,800	2,600	2,200	23,300	46.6
Renter	4,200	6,500	11,500	2,600	1,900	26,700	53.41
\$6000-6999	·	,,,,,,		-,			
Owner	900	8,600	13,800	4,000	3,500	30,800	54.9
Renter	3,200	7,700	10,700	2,100	1,600	25,300	45.1
\$7000-7999		·					
Owner	1,300	9,000	16,700	5,100	4,600	36,700	60.0
Renter	3,800	7,400	9,800	2,000	1,500	24,500	40.0
\$8000-8999							
Owner	1,600	9,200	18,600	5,600	4,100	39.100	63.9
Renter	3,500	7,100	8,900	1,600	1,000	22,100	36.1
\$9000-9999							
Owner	2,100	10,100	20,700	5,900	6,000	44,800	67.6
Renter	4,000	7,200	7,900	1,300	1,100	21,500	32.4
10,000-10,999							
Owner	2,800	9,800	23,500	6,000	4,400	46,500	70.1
Renter	4,300	6,500	7,200	1,100	700	19,800	29.9
11,000-11,999							
Owner	2,600	9,700	18,700	5,300	4,500	40,800	72.7
Renter 12,000 or more	3,600	5,600	4,700	800	600	15,300	27.3
·		5	127 200	40.000	47 200	202 500	75.0
Owner Renter	24,500	72,200		42,200	-	323,500	75.0
Renter	29,500	35,900	30,900	5,700	3,800	107,800	25.0
Total							
Owner:	46,800	162,300	271 200	78,800	77 800	636,900	62.5
Renter:		113,000		23,200		382,900	37.6
•				20,200	25,200	202,700	J



### FUTURE HOUSING SUPPLY

Projections of future housing supply are based upon the existing housing stock which is expected to survive and estimates of new construction, conversions, demolitions, and other losses. Although the future housing supply will be influenced by public programs, financial conditions, and construction technology, it has here been assumed that no major changes in these areas will occur during the projection period 1960 to 1980.

## Housing Conditions and Costs, 1960 - 1980

Housing Supply, 1980: In 1980 there will be over one million housing units in the HMA as compared with approximately 877,800 units in 1960. An additional 213,300 units, representing a 24 percent increase in the supply is projected for 1980. As shown in Table 41 the increase will occur predominantly in single-family owner-occupied structures. There will be a 59 percent increase, or 201,800, more single-family owner-occupied units in 1980 than in 1960. Owner-occupied multifamily units, characteristically two and three family structures, are expected to decrease by 9,200. Renter-occupied units are projected to decrease slightly by 4,500 units, about one percent less than the 1960 level.

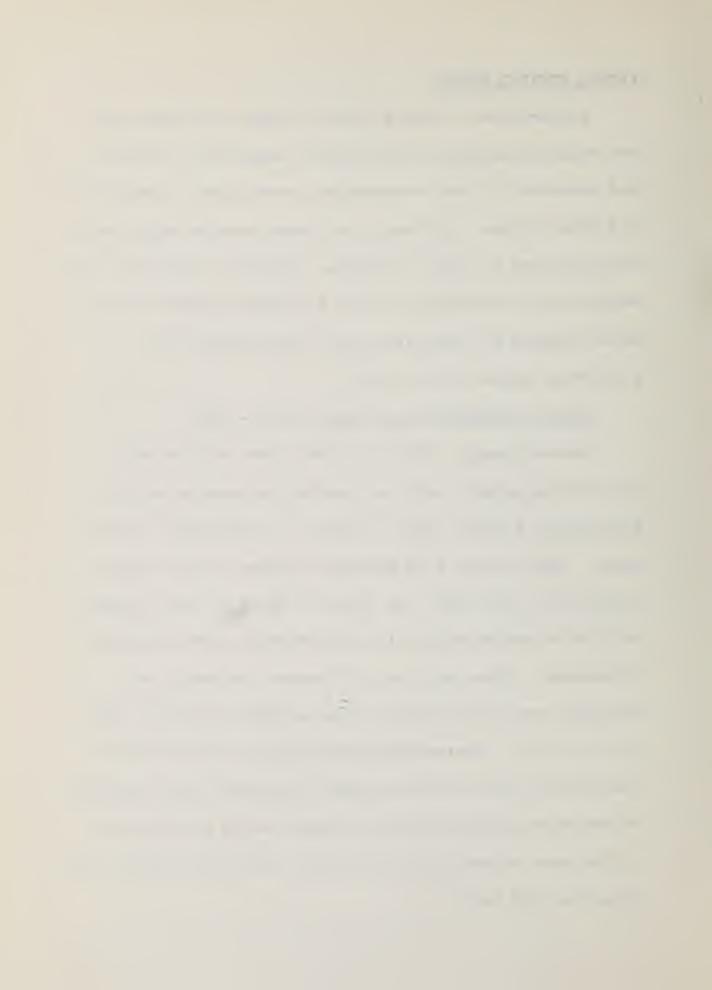


Table 41: Total Housing Stock in the HMA, 1960 to 1980

	1960	1970	1980	Change 1960-1980
Occupied Units Owner-occupied Single-Family	831,800 444,400 343,740	906,890 517,100 423,900	1,019,830 636,970 545,540	192,570
Multifamily Renter-Occupied Cash Rent	100,660 387,400 379,200	93,200 389,790	91,430 382,860	-9,230 -4,540
No Cash Rent Vacant	8,200 45,980	381,420 8,370 59,330	374,470 8,390 - 71,250	190
Total Units:	877,780	966,220	1,091,080	213,300

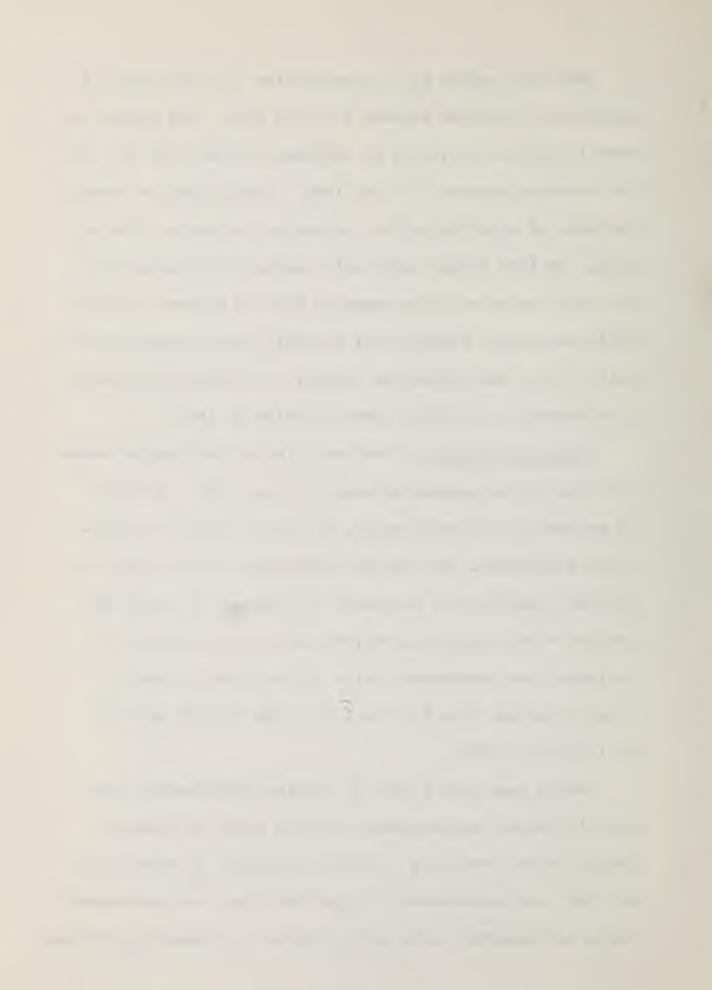
In 1960 approximately 41 percent of all occupied housing units were in single-family owner-occupied structures. By 1980 this percentage is projected to increase to 53 percent. The increase in the number of single-family owner-occupied units is based on substantial increases in the number of households and the incomes of families and individuals. Modest increases in the proportion of home owners in most income groups as evidenced in recent years are also expected. In the past rising incomes have resulted in greater home ownership, and this relationship is projected to continue. At the same time, owner-occupied multifamily units are estimated to decrease from 12 percent to nine percent of all occupied units, because any new construction of two and three family structures is expected to be more than offset by mergers and removals.



Both the number and the proportion of rental units is projected to decline between 1960 and 1980. The number of rental units is projected to increase between 1960 and 1970 but decrease between 1970 and 1980, representing an overall decrease of 4,500 units for the projection period 1960 to 1980. By 1980 rental units will represent 38 percent of the total occupied units compared with 47 percent in 1960. While new rental housing will be built, an estimated 145,500 units during the projection period, the decline will result from removals of housing stock existing in 1960.

Housing Condition: The condition of the housing stock is projected to improve between 1960 and 1980. In 1960 85 percent of the total stock, or 749,580 units, was considered standard. By 1980 the percentage of the stock in standard condition is estimated to increase to nearly 88 percent of the total, or 990,900 units. The number of deficient and substandard units is projected to remain nearly constant from 1960 to 1980, from 128,200 in 1960 to 128,900 in 1980.

Based upon past trends in housing deterioration and rehabilitation, approximately 160,100 units in standard condition are estimated to become deficient or substandard by 1980, and approximately 49,300 deficient and substandard units are expected to be rehabilitated to standard condition.



The projected total of deficient or substandard units,

128,900 in 1980, represents 12 percent of the total 1980

housing stock, a decline from the nearly 15 percent rate

recorded in 1960. These estimates indicate future housing

condition, unless greater efforts are made to rehabilitate

and maintain housing than in the past.

Housing Costs: In 1960 43,650 units, or almost 13 percent of all owner-occupied units, were valued at less than \$10,000. By 1980 in 1960 constant dollars it is estimated that the number of units valued at less than \$10,000 will decrease to 39,100 units, or seven percent of the stock. Rising costs are also demonstrated by the fact that 22 percent of all single-family units will be valued at more than \$25,000 in 1980, whereas in 1960 only 12 percent of the stock was in this category.

Rental prices in 1960 constant dollars will also increase substantially by 1980. In 1960 21 percent of all cash-rent renter-occupied units, or 77,650 units, rented for less than \$60 a month. By 1980 it is estimated that only 53,100 units, or 14 percent of the stock will be available for less than \$60 a month. Nearly 37 percent of the cash rent units in 1980 are estimated to rent for \$100 or more a month.



These significant changes in costs of both renter and owner-occupied units will be due to inflation and improved quality of the units. As with nearly all cost increases, these will most aversely affect those living on fixed or only slowly increasing incomes. Table 42 (on the following page) shows the distribution of unit values for the period 1960 to 1980.

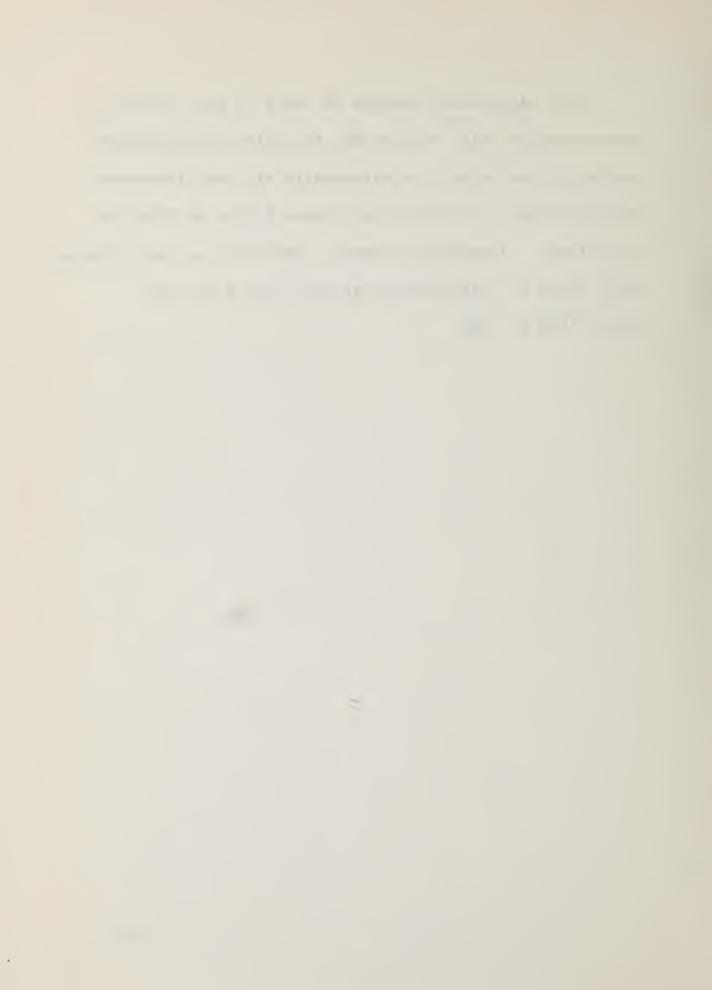
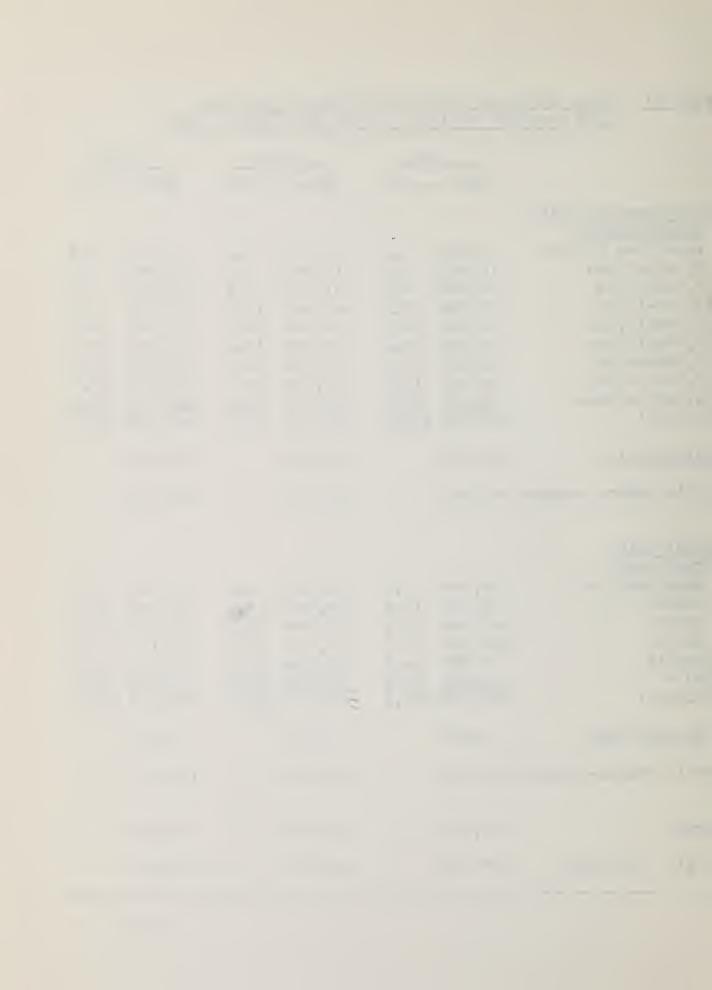


Table 42: Value of Owner and Renter-Occupied Units in 1960 Constant Dollars, in the HMA, 1960 - 1980

	No.	960 %	19	970 %	No.	980 %
Owner-Occupied Units						
Single-Family						
Less than \$5,000	5,843	1.7	4,793	1.1	4,623	0.8
\$5,000-7,400	13,062	3.8	11,046	2.6	11,467	2.1
7,500-9,900	24,749	7.2	21,824	5.1	23,022	4.2
10,000-12,400	47,780	13.9	45,667	10.8	50,217	9.2
12,500-14,900	66,342	19.3	70,832	16.7	79,542	14.6
15,000-17,400	62,904	18.3	79,722	18.8	99,812	18.3
17,500-19,900	41,936	12.2	53,431	12.6	66,540	12.2
20,000-24,900	40,561	11.8	62,230	14.7	89,576	16.4
25,000 or more	40,561	11.8	74,352	17.5	120,739	22.1
Subtotal	343,740	100.0	423,897	99.9	545,538	99.9
Multifamily	100,660		93,200		91,428	
Total: Owner-Occupied	444,400		517,097		636,966	
Rental Units						
Cash Rent	10 000	<b>5</b> 0	3.5. 53.0	4 7	30.040	2 0
Less than \$40	18,898	5.0	15,512	4.1	12,349	3,3
\$40-59	58,751	15.5	48,561	12.7	40,838	10.9
60-79	103,309	27.2	91,799	24.1	81,827	21.9
80-99	106,088	28.0	107,035	28.1	102,154	27.3
100-119	53,886	14.2	63,024	16.5	67,174	17.9
120 +	38,268	10.1	55,484	14.5	70,128	18.7
Subtotal	379,200	100.0	381,415	100.0	374,470	100.0
No Cash Rent:	8,200		8,373		8,394	
Total: Renter-Occupied	d387,400		389,788		382,864	
Vacant	45,980		59,330		71,250	
Total: All Units	877,780		966,215		1,091,080	



### New Construction

By 1980 new construction, or units built between 1960 and 1980, is projected to account for approximately 32 percent of all units in the Housing Market Area.

New construction, therefore, will have a profound effect on the total housing supply.

Annual Rates and Values: The construction of new units between 1960 and 1980 in the HMA is projected to be nearly 346,000 units, or about 17,300 units a year. Single-family units are projected to account for 58 percent of the total new construction during the 20 year period. During the sixties new construction will be fairly evenly divided between single family and rental units. During the seventies, however, single family units will be in the majority as rising incomes result in greater home ownership.

The costs of new construction, like the value of the existing stock, is projected to undergo substantial increases. Between 1960 and 1969 it is estimated that approximately 3,200 single-family units will be constructed at a value of less than \$15,000 as measured in current dollars. By 1980 only a little over 100 units are projected for this value category. The number of new units in the HMA valued at \$25,000 or more, in current dollars, is projected to increase from about 29,600 between 1950 and 1969 to 97,800 between 1970 and 1979. These value increases can be seen in Table 43.

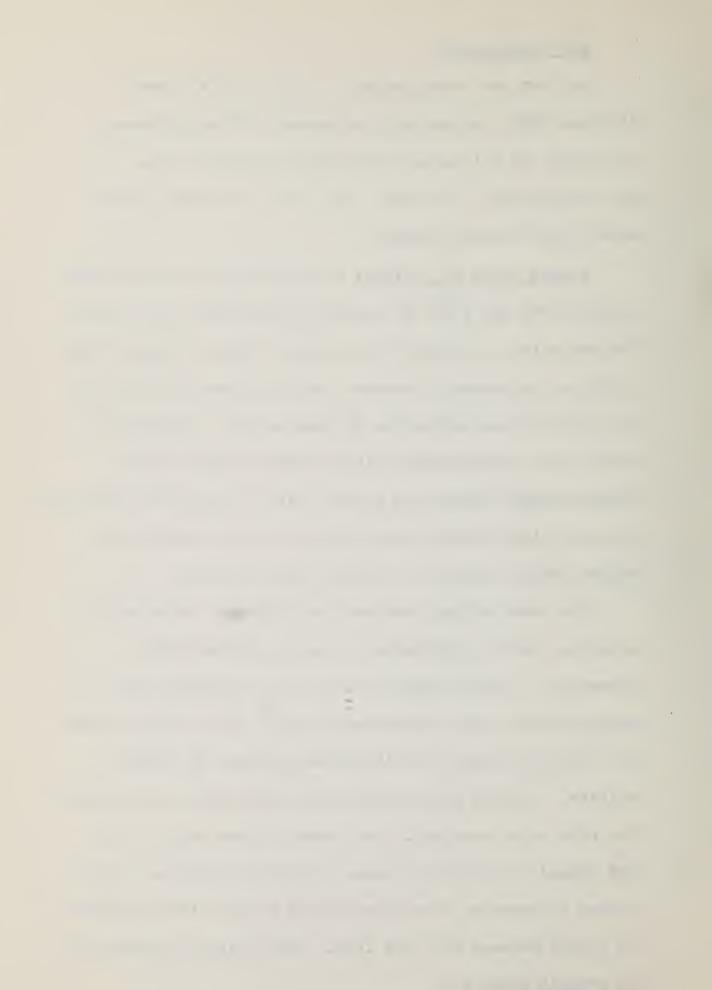
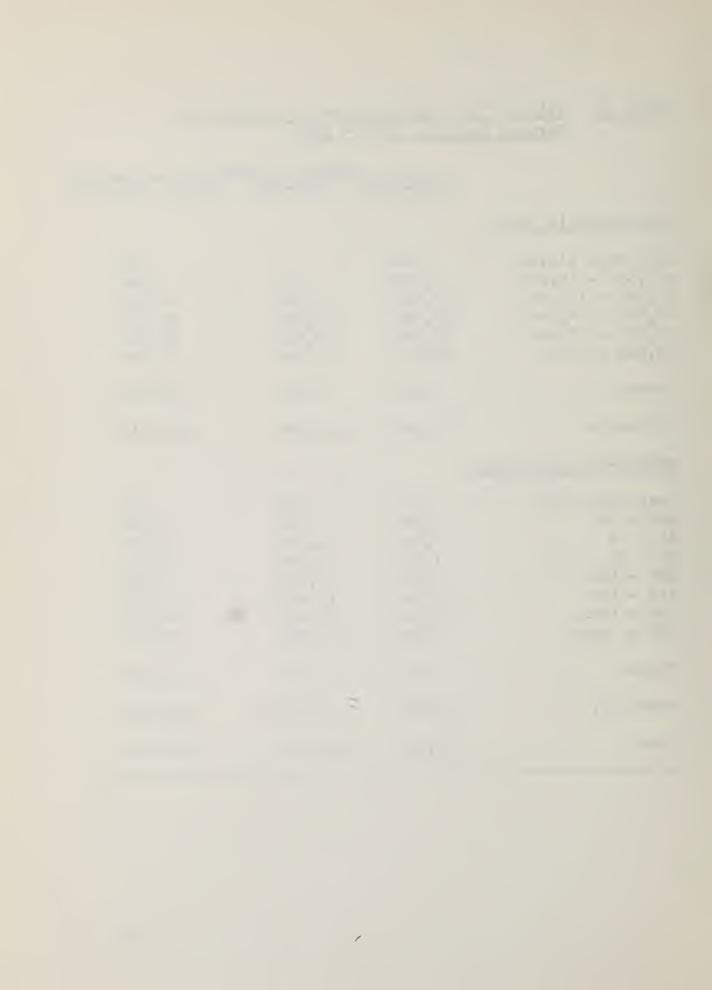


Table 43: Value of New Construction in the HMA in Current Dollars, 1960 - 1980

	Number of Units				
	1960-1969	1970-1979	Total 1960-1979		
Single-Family Units					
Less than \$12,500	500		500		
\$12,500 - 14,999	2,740	120	2,860		
15,000 - 19,999	15,721	2,401	18,122		
20,000 - 24,999	23,521	18,201	41,722		
25,000 - 29,999	12,840	31,601	44,441		
30,000 or more	16,801	66,204	83,005		
Vacant	5,037	5,423	10,460		
Subtotal:	77,160	123,950	201,110		
Renter-Occupied Units					
Less than \$40	542	130	672		
\$40 - 59	4,670	913	5,583		
60 - 79	5,144	1,436	6,580		
80 - 99	7,716	2,805	10,521		
100 - 119	5,618	3,391	9,009		
120 - 149	15,364	19,821	35,185		
150 - 199	19,832	25,428	45,260		
200 or more	8,798	11,280	20,078		
Vacant	4,825	7,031	11,856		
Subtotal:	72,509	72,235	144,744		
Tota1	149,669	196,185	345,854		



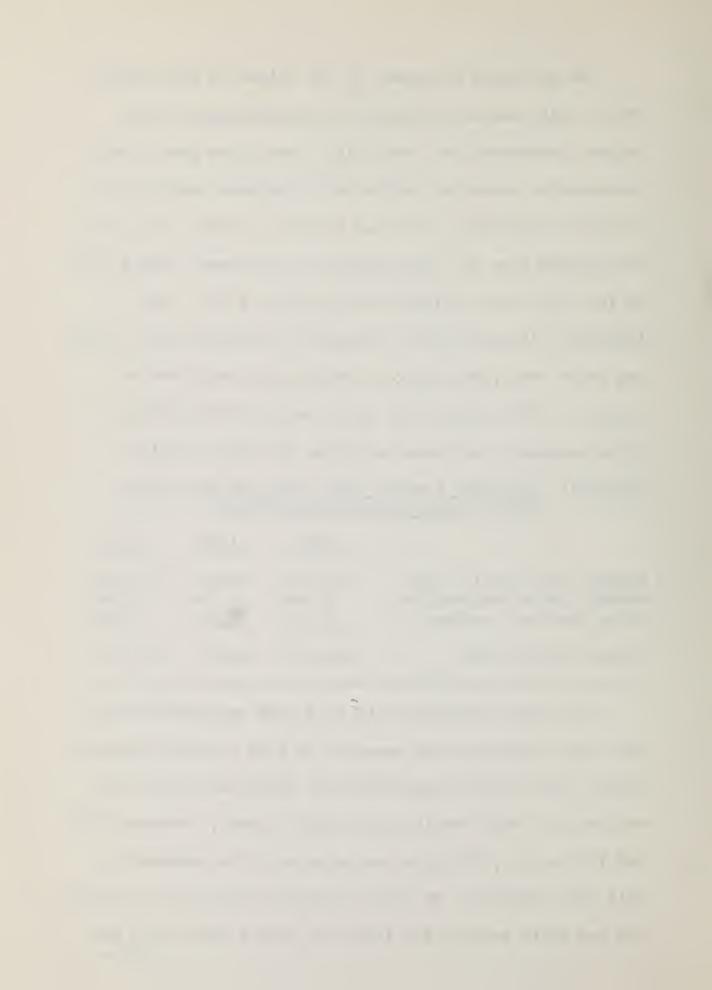
The projected increases in the values of new singlefamily units can be attributed to the increases in the
various components of a new unit. Based upon past trends,
construction costs are estimated to increase from \$14,100
in 1960 to \$19,500 in 1970 and \$23,400 in 1980. The prices
of finished lots are also expected to increase, from \$3,300
in 1960 to \$6,000 in 1970 and \$10,000 in 1980. These
increases, along with an allowance of 10 percent for profits
and sales costs, add up to an average new unit cost of
\$19,200 in 1960, \$28,100 in 1970, and \$36,700 in 1980.
These component increases are shown in Table 44 below.

Table 44: Projected Average Sales Price of New Single-Family Units in the HMA, 1960-1980

	1960	1970	1980
Average Construction Cost Average Price Finished Lot Sales Costs and Profits	\$14,100 3,300 1,745	\$19,500 6,000 2,550	\$23,400 10,000 3,340
Average Sales Price	\$19,145	\$28,050	\$36,740

New renter-occupied units will also undergo considerable rent increases when measured in 1960 constant dollars.

Between 1960 and 1969 approximately 18,000 new units are estimated to rent for less than \$100 a month. Between 1970 and 1979 only 5,300 units are expected to be produced in this rent category. It can be assumed that most, if not all, the new units renting for less than \$100 a month will be - 119 -



governmentally subsidized. The number of units valued at more than \$150 a month are expected to increase from 28,600 between 1960 and 1969 to 36,700 units between 1970 and 1979. The value distributions of new renter units are shown in Table 43.

Projected new construction will not greatly improve
the housing conditions of low-income households, if present
trends continue. Unless vastly increased governmental
subsidy programs are introduced or major reductions in
construction costs are realized, low-income households
will find it increasingly difficult to obtain standard
housing within their means.

# Removals and Survivals

Removals: Between 1960 and 1980 a total of approximately 133,000 units are projected to be removed from the housing supply in the HMA. About 48 percent of the total removals are estimated to be due to demolition, based on the demolition rate during the 1960-1966 period. Fifty-two percent of the losses are attributable to other causes, such as mergers, changes to nonresidential use, fires and other disasters. Losses from other causes are projected to occur at an increasing rate, because of the increasing average age of the housing stock in the certain parts of the metropolitan area.

Table 45: Units Removed from the Housing Supply, HMA, 1960 - 1980

	1960-1969	1970-1979
Demolition		
Single-Family Ownership Units	2,900	3,000
Multifamily Ownership Units	1,460	1,250
Rental Units	26,040	29,185
Subtotal	30,400	33,435
Other Losses	30,830	37,895
Total	61,230	71,330

pemolitions between 1960 and 1980 are expected to result in a loss of 55,000 rental units and 8,600 single-family and multifamily ownership units. Demolitions and



losses from disasters generally occur to units in less than sound condition and to units with values or rents lower than the average value for all units. The result of demolitions is, therefore, to decrease the supply of low and moderate-cost housing. Table 46 shows the rent and value distribution of units removed by demolitions.



Table 46: Total Demolitions of Housing Units by Value and Rents in Current Dollars, HMA, 1960-1969 and 1970-1979

	1960-1969	1970-1979
Single Family Owner Units		
<u>Value</u>		
Less than \$5000 \$5000-7400 \$7500-9900 \$10,000-12,400 \$12,500-14,900 \$15,000-17,400 \$17,500-19,900 \$20,000-24,900 \$25,000 over	400 1,400 600 100 100 75 75 75 75 75	10 776 1,035 517 259 207 196 3,000
MultiFamily Ownership Units	1,460	1,250
Rental Units		
Rent		
Less than \$40 \$40 - 59 \$60 - 79 \$80 - 99 \$100 - 119 \$120 - 149 \$150 - 199 \$200 or more Subtotal	1,736 12,152 6,470 3,551 592 592 493 454 26,040	13 82 289 9,096 15,326 2,627 876 876 29,185
Total	30,400	33,435



Surviving Units: The majority of the 1960 housing stock, 745,000 units, is projected to survive to 1980 despite demolitions and other losses. The 1960 stock is expected to contribute a higher number of single-family owner-occupied units in 1980 than in 1960. This will result from changes in multifamily owner-occupied units to single-family and vacant units to occupied. The number of 1960 occupied rental units will decline significantly by 1980. The projections of surviving stock are shown in Table 47.

Table 47: 1960 Units in the HMA Surviving to 1970 and 1980

Type of Unit	Total Units 1960	Surviving 1970	Surviving 1980	Change 1960-1980
Owner-Occupied Single-Family Multifamily to	343,740	345,880	348,300	4,560
Single Multifamily	100,660	6,000 93,200	6,520 91,430	6,520 <b>-</b> 9,230
Renter-Occupied	387,400	322,110	250,010	-137,390
Vacant	45,980	49,360	48,960	2,980
Total	877,780	816,550	745,220	-132,560

Of the total 1980 housing stock survivals will account for a larger proportion than new construction. Survivals will represent 69 percent of owner-occupied units and 65 percent of the renter-occupied units in 1980.

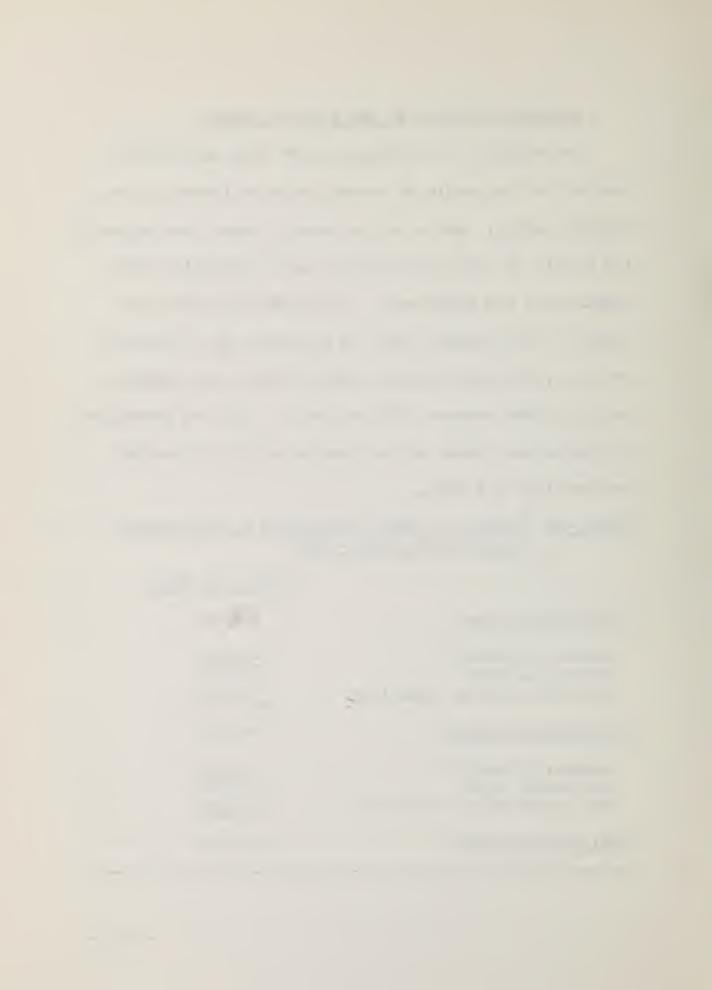


## Projected Changes in the Housing Supply

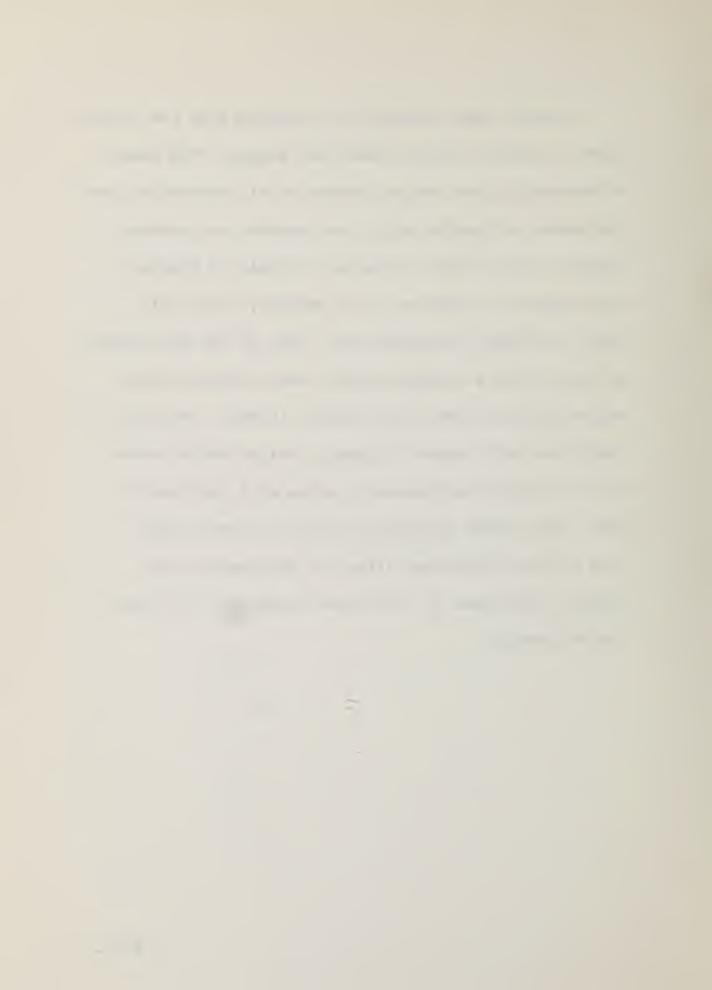
The growth in the housing stock from one year to another is the result of annual gains or losses to the housing supply. Gains in the housing supply are primarily the result of new construction; losses primarily from demolitions and disasters. In the HMA the annual net change in the housing stock is projected to be approximately 8,000 units between 1960 and 1969, and approximately 12,600 between 1970 and 1979. Table 48 summarizes the gains and losses to the housing supply in the HMA between 1960 and 1980.

Table 48: Summary of Gains and Losses to the Housing Supply, HMA, 1960 - 1980

	Number of Units
1960 Housing Supply	877,780
Losses, 1960-1969 Survivals, 1970 New Construction, 1960-1969	-61,230 816,550 149,670
1970 Housing Supply	966,220
Losses, 1970-1979 Survivals, 1980 New Construction 1970-1979	-71,330 894,890 196,190
1980 Housing Supply	1,091,080



Several clear trends can be derived from the projections of future housing demand and supply. The number of households, the median incomes of all households, and the number of housing units are expected to increase between 1960 and 1980. The total supply of housing is estimated to increase by 24 percent, which will match the growth in households. Most of the new housing is expected to be single-family owner-occupied units reflecting the trend toward higher incomes. Housing conditions will improve slightly, while housing costs for both rental and ownership units will continue to rise. The growth in housing supply, however, will have a relatively minor affect on ameliorating the housing conditions of low-income households, if these trends prevail.



## CONCLUSION

In 1980 the projected demand for housing units in the Housing Market Area is expected to be matched by the projected supply of housing units. The number of households is estimated to increase by 23 percent between 1960 and 1980, while the supply of units is estimated to expand by 24 percent over the same period. Low and moderate income families, however, are expected to continue to experience serious shortages of adequate housing.

Table 19, which projects the number of renter-households and owner-households by income groups, rents, and housing values in 1970 and 1980, suggests the severity of future housing problems. Specifically, the Table shows renterhouseholds who are projected to pay more than 25 percent of their monthly incomes on rent in 1970 and 1980, assuming that no major changes in the housing situation due to public intervention or private investment occur during the projection period. These households represent approximately 23 percent of all renter-households in 1970, and 22 percent of all renter households in 1980. Numerically, approximately 111,000 renter-households in 1970 and 88,000 such households in 1980 will need some sort of housing assistance if they are to pay not more than 25 percent of their incomes for rent.



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Dollars in	
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ts and Values	
nd Unit Ren	
/ Income and	
Households by	1970 and 1980
Table 49:	

1970 Rents

Total .	8,6	32,595	7,4	2,9	3,6	916	3,0	389,786		4,49	7,6	4,99	2,69	6949	25,296	4,49	3,59	142,897	382,864
No Cash Rent	1,784 652	736	တ	9	$\infty$	7		,37		5	5	9	9	2	508	2	9	3,401	,39
\$120 +		1,894	90 7	37	,19	8,260	13	5,48		•	-	~	•	-	2,590	~	-	48,443	-
\$100-119	8 0	3,494	17	T,	7	11,262	8	3,0		•	2,260	~	•	4,378	4,690	-	9,879	2	67,174
\$80-89	9,474	-	12,937	1,6	1,9	2	19,6	07,00		7,182	4	,71	,13	,21	8,903	69	, 26	3,91	.02,154
\$70-79	-	5,385	•	•	17	6,232	7,046	51,9851		5	4,243	-	3,922	4	3,795	4	4	12,132	,17
69-09\$	8,041	•	,2	6	OJ.	2	3,8	39,814	Rents		4,030	3,8	3,1	3,0	2,542	2,1	3,10	6,659	34,65
\$50-59	8,071 4,264	3,784	•	•	•	•	7		1980	6,118	- 4	•	No.	-	1,368	-	•	•	•
\$40-49	8,405 3,638	2,089	1,188	841	620	954	87	19,959		6,372	3,091	1,602	1,053	846	645	450	837	1,514	16,410
\$30-39	5,823	1,036	465	234	222	323	257	10,843		4,414	1,662	795	413	331	179	161	283	442	8,680
Less than \$30 \$30-39 \$40-49	2,794	407	138	66	74	66	68	4,669		2,118	675	312	136	86	92	53	87	114	3,669
	000						e e		į	\$2,000								a	
1970 Incomes	Less than \$2,000 \$2,000-2,999	3,000-3,999	5,000-5,999	666'9-000'9	7,000-7,999,	8,000-9,999	10,000 or more	Total:	1980 Incomes	Less than \$2,	\$2,000-2,999	3,000-3,999	4,000-4,999	2,000-5,999	666'9-000'9	7,000-7,999	8,000-9,999	10,000 or more	Total:

Those renter-households payming more than 25 percent of their monthly incomes for housing are outlined.



Households by Income and Unit Rents and Values in 1960 Constant Dollars in the HMA. 1970 and 1980 to (continued) Table 49:

		r			7000 700				
	Less than	\$5,000-	\$7,500-	- \$7,500- \$10,000- \$12,500-	\$12,500-	\$15,000-	\$20,000-		
1970 Incomes	\$5,000	7,499	666'6	12,499	14,999	19,999	24,000	\$25,000+	Tota1
Tess than \$2,000	869	1,301	1,884	2,638	2,548	•	1,102	1,096	14,892
\$2.000-2.999	438	734	1,055	1,630	1,582	1,886	697	437	8,459
3.000-3.999	363	544	1,233	1,740	2,050	2,497	723	486	9,636
4,000-4,999	424	888	1,514	2,680	3,404	3,906	1,044	543	14,402
5,000-5,999	487	1,134	2,101	4,261	5,999	7,531	1,820	904	24,237
666,9-000,9	327	987	2,226	4,731	7,569	10,719	2,495	1,232	30,286
7,000-7,999	425	975	2,217	5,141	8,992	14,362	4,051	1,807	37,970
8,000,8	512	1,617	3,586	8,491	15,226	28,490	10,057	5,219	73,198
10,000 or more	948	2,846	800'9	14,355	23,462	60,309	40,241	62,628	210,797
Total:	4,793	11,026	21,824	45,667	70,832	133,153	62,230	74,352	423,877
1980 Incomes		19	1980 Single	-Family Unit	it Values				
Less than \$2,000	634	949	1.374	1.923	1,858	2,519	803	199	10,859
9	381	639	616	1,420	1,378	1,643	607	381	7,368
3,000-3,999	266	470	904	1,275	1,502	$\infty$	530	356	7,133
4,000-4,999	267	559	953	1,687	2,142	2,458	657	341	9,064
5,000-5,999	341	196	1,474	2,990	4,210	N	1,277	634	17,007
666'9-000'9	254	767	1,731	3,679	5,887	8,337	1,941	958	23,554
7,000-7,999	325	747	1,699	3,939	6,889	11,003	3,104	1,384	29,090
8,000-9,999	473	1,494	3,314	7,846	0	<b>€</b>	9,293	4,822	67,636
10,000 or more	1,682	5,046	10,654	25,458	41,607	106,952	71,364	111,064	373,827
Total:	4,623	11,467	23,022	50,217	79,542	166,352	89,576	120,739	545,538

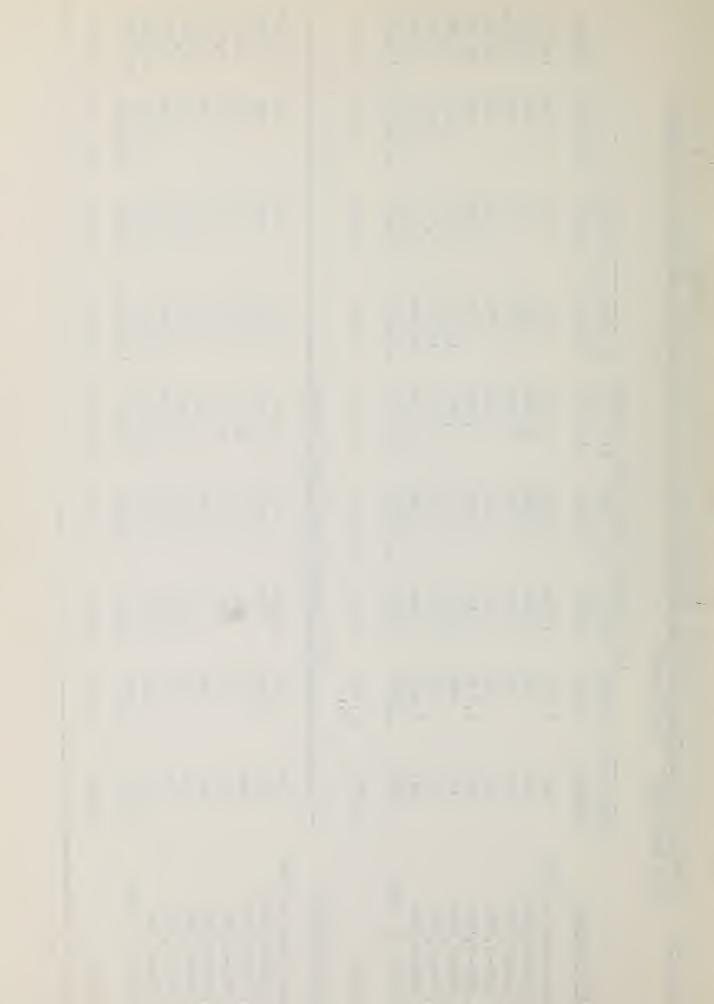


Table 49 projects owner-households, but does not show the number of owner-households expected to pay excessive proportions of their incomes on home ownership. It is probable that such households represent, as in the case of renter-households, a significant percentage of all owner-households.

While Table 49 gives an indication of the future magnitude of the housing problem, it is probably over optimistic. The projection method assumes that approximately the same relationship between housing costs and incomes will exist in 1980 as in 1960. It also assumes that increases in income will be shared equally by all households. Low-income households, however, are more likely to be tied to fixed incomes, or to experience less increases in income than other groups. As a result the number of renter-households paying in excess of 25 percent of their incomes for rent might in fact be 10 to 15 percent higher than projected in 1970, and 20 to 30 percent higher than projected in 1980.

The housing needs of low and moderate income households, as briefly indicated here, will be analyzed in greater detail in Volume 2 of this study. The projections suggest that the issue must be viewed as a metropolitan responsibility rather than a central city and core communities problem. To meet these needs a serious commitment is required on the part of all communities to contribute to the development of housing for low and moderate income households throughout the Boston metropolitan area.





